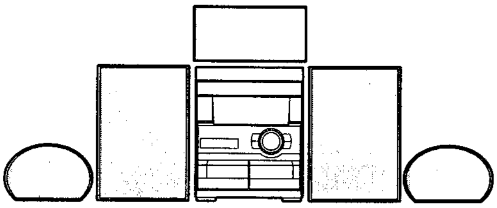
aiwa

aiwa SERVICE

NSX-MT90



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: 2ZM–3MK2 PR4NM
- BASIC CD MECHANISM: 4ZG–1 Z2DNM

- TYPE : U

SERVICE MANUAL

SYSTEM	CD – CASSEIVER	SPEAKER
NSX-MT90	CX-NMT90	SX-NA94

- If requiring information about the CD mechanism, see Service Manual of 4ZG-1. (S/M Code No.09-974-187-50T)

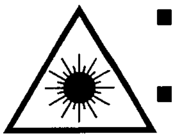
S/M Code No. 09–978–195–0FP

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserståling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

ATTENTION

L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CLASS 1	LASER PRODUCT
KLASSE 1	LASER PRODUKT
LUOKAN 1	LASER LAITE
KLASS 1	LASER APPARAT

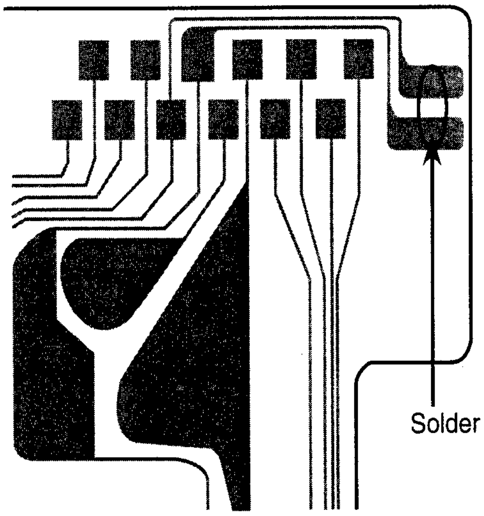
Precaution to replace Optical block

(KSS-213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.

PICK - UP Assy P.C.B.



SPECIFICATIONS

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM Tuner section>

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	**Front** 145 W + 145 W (50 Hz - 20 kHz, 6 ohms, T.H.D. 1 %) **Rear (Surround)** 10 W + 10 W (16 ohms, T.H.D. 1 %, 1 kHz) **Center** Rated: 20 W (8 ohms, T.H.D. 1 %, 1 kHz)
Total harmonic distortion	0.05 % (120 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 210 mV (adjustable) MD: 210 mV (adjustable) MIC 1, MIC 2: 1.4 mV (10 kohms)
Outputs	LINE OUT: 200 mV SUPER WOOFER: 2.9 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 16 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	CrO2 tape: 50 Hz - 16000 Hz Normal tape: 50 Hz –15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, CrO2 tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head x 1 Deck 2: Recording/playback/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.03% (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<General>

Power requirements	120 V AC, 60 Hz
Power consumption	155 W
Dimensions of main unit	260 x 309 x 370 mm
Weight of main unit	10.6 kg (19 lbs 13 oz.)

<Speaker system SX–NA94>

Cabinet type	3 way, bass reflex (magnetic shielded type)
Speakers	Woofer: 160 mm ($6^{3}/_{8}$ in.) cone type Tweeter: 80 mm ($3^{1}/_{4}$ in.) cone type Super Tweeter: 20 mm ($^{13}/_{16}$ in.) cone type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	243 x 304 x 255 mm
Weight	4.2kg

- Design and specifications are subject to change without notice.
- Manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY", the double-D symbol DD and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
  Under license from BBE Sound, Inc.

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NFR-910-010		IB,U(ESF)I
2	87-NFR-640-010		RC UNIT,RC-7AS09
3	87-A90-064-010		FEEDER-ANT,FM (SHS)
4	87-006-225-010		ANT,LOOP ANT NC2

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-020-454-010		IC,DN6851
	87-NF4-642-010		IC,LC866548V-5E54
	87-070-083-010		IC,GP1U281X
	87-070-289-040		C-IC,BU2092F
	87-A20-455-010		IC,HA12211
	87-A20-355-010		IC,CXA1553P
	87-A20-083-010		IC,BA3835S
	87-A20-450-040		C-IC,BH3864F
	87-A20-056-010		IC,BA3880S
	87-A20-456-040		C-IC,BH3810FS
	87-017-888-080		C-IC,NJM4558MD
	86-NFZ-655-010		IC,LC72131D(Z)
	87-A20-438-010		IC,LA1837
	87-A20-560-040		IC,M65849BFP
	87-A20-453-010		C-IC,NJW1102B
	87-A20-452-040		C-IC,TC9260FS
TRANSISTOR			
	87-026-463-080		TR,2A933S
	87-026-263-080		C-TR,RN1410
	89-213-702-010		TR,2SB1370E
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-026-610-080		TR,KTC3198GR
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-085-070		C-TR,CSA1362GR
	87-A30-083-080		TR,CSD1489B
	87-A30-084-080		TR,CSB1058B
	87-A30-071-080		C-TR,RT1N 144C
	87-026-211-080		C-TR,DTA144EK
	87-026-609-080		TR,KTA1266GR
	87-A30-086-070		C-TR,CSD1306E
	87-A30-106-070		C-TR,CMBT5551
	87-A30-111-080		TR,C2N5401
	87-A30-097-010		TR,FN1016
	87-A30-098-010		TR,FP1016
	87-A30-089-010		FET,2SK2723
	87-A30-072-080		C-TR,RT1P 144C
	87-A30-087-080		C-FET,2SK2158
	87-A30-074-080		C-TR,RT1P 141C
	89-327-143-080		C-TR,2SC2714(O)
	89-505-434-540		C-FET,2SK543-TB(4/5)
	87-A30-112-080		TR,C2N5551
	89-420-612-080		TR,2SD2061 (2W)
	87-026-232-080		TR,DTA144WK
DIODE			
	87-A40-246-080		DIODE,1N4148T-72
	87-017-654-010		DIODE,GBU6JL6131
	87-017-437-080		DIODE,1N4148M
	87-A40-269-080		C-DIODE,MC2836
	87-A40-270-080		C-DIODE,MC2838
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-205-080		ZENER,UZ6.2BSC
	87-A40-211-080		ZENER,UZ36BSA
	87-A40-206-080		ZENER,UZ10BSC
	87-A40-004-080		ZENER,MTZJ16A
	87-A40-370-090		DIODE,RK46-P20
	87-A40-202-080		ZENER,UZ5.1BSB
	87-017-481-080		ZENER,UZ-5.6BSB
	87-A40-192-080		ZENER,UZ4.3BSA
	87-A40-239-080		ZENER,UZ5.6BSA
MAIN C.B			
C101	87-A10-231-090		CAP,E 3300-80
C102	87-A10-231-090		CAP,E 3300-80
C103	87-016-658-090		CAP,E 4700-35 M SMG
C104	87-016-658-090		CAP,E 4700-35 M SMG
C105	87-012-368-080		C-CAP,S 0.1-50 ZF
C106	87-012-368-080		C-CAP,S 0.1-50 ZF
C107	87-012-368-080		C-CAP,S 0.1-50 ZF
C108	87-012-368-080		C-CAP,S 0.1-50 ZF
C109	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C110	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C111	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C112	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C113	87-010-247-080		CAP,E 100-50 M SME
C116	87-010-247-080		CAP,E 100-50 M SME
C117	87-010-430-080		CAP,E 100-63
C118	87-010-263-080		CAP,E 100-10 SME
C119	87-010-260-080		CAP,E 47-25 SME
C120	87-010-403-080		CAP,E 3.3-50 M SME
C121	87-012-140-080		C-CAP,S 470P-50 J CH
C122	87-010-263-080		CAP,E 100-10 SME
C123	87-010-247-080		CAP,E 100-50 M SME
C124	87-010-112-080		CAP,E 100-16 M SME
C125	87-010-235-080		CAP,E 470-16 SME
C129	87-010-393-080		CAP,E 100-35 M SME
C201	87-010-400-080		CAP,E 0.47-50 M SME
C202	87-010-400-080		CAP,E 0.47-50 M SME
C205	87-010-184-080		C-CAP,S 3300P-50 KB
C206	87-010-184-080		C-CAP,S 3300P-50 KB
C207	87-010-404-080		CAP,E 4.7-50 M SME
C208	87-010-404-080		CAP,E 4.7-50 M SME
C209	87-010-404-080		CAP,E 4.7-50 M SME
C210	87-010-404-080		CAP,E 4.7-50 M SME
C211	87-010-186-080		C-CAP,S 4700P-50 KB
C212	87-010-186-080		C-CAP,S 4700P-50 KB
C213	87-010-260-080		CAP,E 47-25 SME
C214	87-010-260-080		CAP,E 47-25 SME
C215	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C219	87-012-368-080		C-CAP,S 0.1-50 ZF
C220	87-012-368-080		C-CAP,S 0.1-50 ZF
C221	87-012-368-080		C-CAP,S 0.1-50 ZF
C222	87-012-368-080		C-CAP,S 0.1-50 ZF
C223	87-010-194-080		C-CAP,S 0.047-25 ZF
C225	87-A10-516-080		C-CAP,S 100P-200 JC
C226	87-A10-516-080		C-CAP,S 100P-200 JC
C229	87-016-461-080		C-CAP,S 0.47-16 ZF
C230	87-016-461-080		C-CAP,S 0.47-16 ZF
C242	87-010-406-080		CAP,E 22-50 M SME
C243	87-010-197-080		C-CAP,S 0.01-25 KB
C244	87-010-406-080		CAP,E 22-50 M SME
C301	87-010-318-080		C-CAP,S 47P-50 J CH
C302	87-010-318-080		C-CAP,S 47P-50 J CH
C303	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C304	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C305	87-012-145-080		C-CAP,S 270P-50 J CH
C306	87-012-145-080		C-CAP,S 270P-50 J CH
C307	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C311	87-010-198-080		C-CAP,S 0.022-25 KB
C312	87-010-198-080		C-CAP,S 0.022-25 KB
C313	87-010-180-080		C-CAP,S 1500P-50 KB
C314	87-010-180-080		C-CAP,S 1500P-50 KB
C315	87-010-178-080		C-CAP,S 1000P-50 KB
C316	87-010-178-080		C-CAP,S 1000P-50 KB
C317	87-012-142-080		C-CAP,S 0.33-16 ZF
C318	87-012-142-080		C-CAP,S 0.33-16 ZF
C319	87-012-141-080		C-CAP,S 0.22-16 ZF
C320	87-012-141-080		C-CAP,S 0.22-16 ZF
C321	87-012-141-080		C-CAP,S 0.22-16 ZF
C322	87-012-141-080		C-CAP,S 0.22-16 ZF
C324	87-010-260-080		CAP,E 47-25 SME
C325	87-010-370-080		CAP,E 330-6.3 M SME

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C327	87-010-404-080		CAP,E 4.7-50 M SME
C328	87-010-404-080		CAP,E 4.7-50 M SME
C332	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C335	87-010-401-080		CAP,E 1-50 M SME
C336	87-010-401-080		CAP,E 1-50 M SME
C337	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C339	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C340	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C351	87-012-140-080		C-CAP,S 470P-50 J CH
C352	87-012-140-080		C-CAP,S 470P-50 J CH
C354	87-010-175-080		C-CAP,S 560P-50 J SL
C355	87-010-178-080		C-CAP,S 1000P-50 KB
C356	87-010-260-080		CAP,E 47-25 SME
C357	87-010-197-080		C-CAP,S 0.01-25 KB
C358	87-010-183-080		C-CAP,S 2700P-50 KB
C359	87-010-183-080		C-CAP,S 2700P-50 KB
C360	87-010-183-080		C-CAP,S 2700P-50 KB
C370	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C371	87-010-179-080		C-CAP,S 1200P-50 KB
C372	87-010-179-080		C-CAP,S 1200P-50 KB
C373	87-010-179-080		C-CAP,S 1200P-50 KB
C374	87-010-179-080		C-CAP,S 1200P-50 KB
C375	87-010-545-080		CAP,E 0.22-50 M SME
C376	87-010-545-080		CAP,E 0.22-50 M SME
C378	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C381	87-010-197-080		C-CAP,S 0.01-25 KB
C382	87-010-318-080		C-CAP,S 47P-50 J CH
C383	87-010-197-080		C-CAP,S 0.01-25 KB
C384	87-010-402-080		CAP,E 2.2-50 M SME
C385	87-010-184-080		C-CAP,S 3300P-50 KB
C386	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C388	87-010-154-080		C-CAP,S 10P-50 D CH
C401	87-010-187-080		C-CAP,S 5600P-50 KB
C402	87-010-187-080		C-CAP,S 5600P-50 KB
C403	87-010-405-080		CAP,E 10-50 M SME
C404	87-010-405-080		CAP,E 10-50 M SME
C405	87-010-260-080		CAP,E 47-25 SME
C406	87-010-101-080		CAP,E 220-16 SME
C407	87-010-188-080		C-CAP,S 6800P-50 KB
C408	87-010-188-080		C-CAP,S 6800P-50 KB
C409	87-012-140-080		C-CAP,S 470P-50 J CH
C410	87-012-140-080		C-CAP,S 470P-50 J CH
C411	87-010-197-080		C-CAP,S 0.01-25 KB
C412	87-010-197-080		C-CAP,S 0.01-25 KB
C413	87-010-195-080		C-CAP,S 0.068-25 ZF C2012
C414	87-010-195-080		C-CAP,S 0.068-25 ZF C2012
C415	87-010-404-080		CAP,E 4.7-50 M SME
C416	87-010-404-080		CAP,E 4.7-50 M SME
C417	87-010-404-080		CAP,E 4.7-50 M SME
C418	87-010-404-080		CAP,E 4.7-50 M SME
C421	87-010-401-080		CAP,E 1-50 M SME
C422	87-010-401-080		CAP,E 1-50 M SME
C516	87-010-196-080		C-CAP,S 0.1-25 ZF
C605	87-010-180-080		C-CAP,S 1500P-50 KB
C606	87-010-180-080		C-CAP,S 1500P-50 KB
C611	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C613	87-010-404-080		CAP,E 4.7-50 M SME
C614	87-010-404-080		CAP,E 4.7-50 M SME
C615	87-010-183-080		C-CAP,S 2700P-50 KB
C619	87-010-263-080		CAP,E 100-10 SME
C620	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C621	87-010-263-080		CAP,E 100-10 SME
C622	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C623	87-010-194-080		C-CAP,S 0.047-25 ZF
C629	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C646	87-010-322-080		C-CAP,S 100P-50 J CH
C647	87-010-322-080		C-CAP,S 100P-50 J CH
C701	87-010-381-080		CAP,E 330-16 SME
C702	87-010-404-080		CAP,E 4.7-50 M SME
C703	87-010-197-080		C-CAP,S 0.01-25 KB
C704	87-010-197-080		C-CAP,S 0.01-25 KB
C711	87-010-263-080		CAP,E 100-10 SME
C712	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C713	87-010-197-080		C-CAP,S 0.01-25 KB
C714	87-010-197-080		C-CAP,S 0.01-25 KB
C721	87-010-312-080		C-CAP,S 15P-50 J CH
C722	87-010-312-080		C-CAP,S 15P-50 J CH
C723	87-010-178-080		C-CAP,S 1000P-50 KB
C725	87-010-178-080		C-CAP,S 1000P-50 KB
C727	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C728	87-010-248-080		CAP,E 220-10 SME
C755	87-010-197-080		C-CAP,S 0.01-25 KB
C756	87-010-197-080		C-CAP,S 0.01-25 KB
C757	87-010-318-080		C-CAP,S 47P-50 J CH
C758	87-010-149-080		C-CAP,S 5P-50 CH
C761	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C762	87-010-197-080		C-CAP,S 0.01-25 KB
C763	87-010-194-080		C-CAP,S 0.047-25 ZF
C765	87-010-197-080		C-CAP,S 0.01-25 KB
C766	87-010-197-080		C-CAP,S 0.01-25 KB
C767	87-010-405-080		CAP,E 10-50 M SME
C768	87-010-197-080		C-CAP,S 0.01-25 KB
C769	87-010-408-080		CAP,E 47-50 SME
C770	87-015-821-080		C-CAP, 0.047-50 ZF GR
C771	87-010-407-080		CAP,E 33-50 SME
C772	87-010-194-080		C-CAP,S 0.047-25 ZF
C773	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C774	87-010-263-080		CAP,E 100-10 SME
C775	87-010-404-080		CAP,E 4.7-50 M SME
C776	87-010-197-080		C-CAP,S 0.01-25 KB
C777	87-010-400-080		CAP,E 0.47-50 M SME
C778	87-010-401-080		CAP,E 1-50 M SME
C779	87-010-401-080		CAP,E 1-50 M SME
C780	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C781	87-010-405-080		CAP,E 10-50 M SME
C782	87-010-405-080		CAP,E 10-50 M SME
C783	87-015-819-080		C-CAP,0.01-50 K B
C784	87-010-197-080		C-CAP,S 0.01-25 KB
C785	87-010-400-080		CAP,E 0.47-50 M SME
C786	87-010-400-080		CAP,E 0.47-50 M SME
C787	87-010-184-080		C-CAP,S 3300P-50 KB
C788	87-010-184-080		C-CAP,S 3300P-50 KB
C789	87-010-179-080		C-CAP,S 1200P-50 KB
C790	87-010-179-080		C-CAP,S 1200P-50 KB
C791	87-010-405-080		CAP,E 10-50 M SME
C793	87-010-178-080		C-CAP,S 1000P-50 KB
C794	87-010-406-080		CAP,E 22-50 M SME
C795	87-010-596-080		C-CAP,S 0.047-16 KR
C796	87-010-403-080		CAP,E 3.3-50 M SME
C797	87-010-182-080		C-CAP,S 2200P-50 KB
C798	87-010-182-080		C-CAP,S 2200P-50 KB
C799	87-010-194-080		C-CAP,S 0.047-25 ZF
C812	87-010-197-080		C-CAP,S 0.01-25 KB
C814	87-010-197-080		C-CAP,S 0.01-25 KB
C820	87-010-408-080		CAP,E 47-50 SME
C821	87-010-197-080		C-CAP,S 0.01-25 KB
C822	87-010-197-080		C-CAP,S 0.01-25 KB
C823	87-010-197-080		C-CAP,S 0.01-25 KB
C828	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C829	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C959	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C960	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C961	87-010-152-080		C-CAP,S 8P-50 D CH
CF801	87-008-261-010		FLTR,CFSFE10.7MA5
CF802	87-008-261-010		FLTR,CFSFE10.7MA5
FC602	88-906-241-110		FF-CABLE, 6P 1.25
FFE801	A8-7ZA-293-070		7ZA-2 YFEUNC
J252	87-A60-031-010		JACK,DIA6.3 BLK ST W/S
J253	87-A60-413-010		JACK,PIN 1P BLK YIC 21-3466

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
J254	87-A60-238-010		TERMINAL,SP 4P(MSC)
J601	87-A60-426-010		JACK,PIN 6P YKC21-3835
J801	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02
L201	87-003-383-010		COIL,1UH K
L202	87-003-383-010		COIL,1UH K
L301	87-A50-049-010		COIL,TRAP 85K(COI)
L302	87-A50-049-010		COIL,TRAP 85K(COI)
L351	87-007-342-010		COIL,OSC 85KHZ BIAS
L601	87-003-231-080		C-COIL,2125 1UH K ML
L770	87-005-849-080		COIL,10UH K CECS
L771	87-A50-165-010		COIL,FM DET-N(TOK)
L772	87-A90-245-010		FLTR,CFAZH-450 (TOK)
L791	87-003-293-010		COIL,TRAP MPX
L792	87-003-293-010		COIL,TRAP MPX
L832	87-005-847-080		COIL,2.2UH K CECS
L981	87-NF4-650-010		COIL,AM PACK4N(TOK)
⚠ PR201	87-026-691-080		FUSE,10A 125V 251
⚠ PR202	87-026-691-080		FUSE,10A 125V 251
R123	87-022-200-080		RES,M/F 0.56-1W J
R231	87-A00-262-080		RES,M/F 0.15-2W J
R232	87-A00-262-080		RES,M/F 0.15-2W J
RY101	87-045-389-010		RELAY,12V OSA-SS-212DM5
RY201	87-045-382-010		RELAY,12V OUAZ-SH-112L
SFR301	87-024-435-080		SFR,33K H RH063MC
SFR302	87-024-435-080		SFR,33K H RH063MC
SFR303	87-024-435-080		SFR,33K H RH063MC
SFR304	87-024-435-080		SFR,33K H RH063MC
SFR305	87-024-436-080		SFR,47K H RH063MC
SFR306	87-024-436-080		SFR,47K H RH063MC
SFR351	87-024-436-080		SFR,47K H RH063MC
SFR352	87-024-436-080		SFR,47K H RH063MC
W1	85-NF5-628-010		F-CABLE,7P-2.5
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
FRONT C.B			
C101	87-010-198-080		C-CAP,S 0.022-25 KB
C102	87-010-198-080		C-CAP,S 0.022-25 KB
C103	87-010-197-080		C-CAP,S 0.01-25 KB
C104	87-010-312-080		C-CAP,S 15P-50 J CH
C105	87-010-316-080		C-CAP,S 33P-50 J CH
C106	87-010-320-080		C-CAP,S 68P-50 J CH
C107	87-012-157-080		C-CAP,S 330P-50 J CH GRM
C108	87-010-405-040		CAP,E 10-50 M SME
C109	87-010-494-040		CAP,E 1-50 5L SRE
C110	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C111	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C112	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C113	87-A10-189-040		CAP,E 220-10 M
C114	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C115	87-010-178-080		C-CAP,S 1000P-50 KB
C116	87-010-494-040		CAP,E 1-50 5L SRE
C117	87-010-555-040		CAP,E 100-10 5L SRE
C118	87-010-194-080		C-CAP,S 0.047-25 ZF
C119	87-010-408-040		CAP,E 47-50 M SME
C120	87-010-404-040		CAP,E 4.7-50 SME
C121	87-010-404-040		CAP,E 4.7-50 SME
C122	87-010-194-080		C-CAP,S 0.047-25 ZF
C123	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C124	87-018-209-080		CAP,TC U 0.1-50 ZF UP050
C125	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C127	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C130	87-010-178-080		C-CAP,S 1000P-50 KB
C201	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C351	87-012-158-080		C-CAP,S 390P-50 J CH GRM
C352	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C353	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C354	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C355	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C356	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C357	87-010-196-080		C-CAP,S 0.1-25 ZF C2012

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C403	87-010-992-080		C-CAP,S 0.047-25 KB MK212
C404	87-010-992-080		C-CAP,S 0.047-25 KB MK212
C405	87-010-401-040		CAP,E 1-50 M SME
C406	87-010-494-040		CAP,E 1-50 5L SRE
C407	87-010-184-080		C-CAP,S 3300P-50 KB
C408	87-010-184-080		C-CAP,S 3300P-50 KBB
C409	87-010-592-080		C-CAP,S 0.022-16 KR GRM
C410	87-010-592-080		C-CAP,S 0.022-16 KR GRM
C411	87-A10-201-080		C-CAP,S 0.33-16 KB
C412	87-A10-201-080		C-CAP,S 0.33-16 KB
C413	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C414	87-010-374-040		CAP,E 47-10 SME
C415	87-010-374-040		CAP,E 47-10 SME
C416	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C417	87-016-081-080		C-CAP,S 0.1-16 KR
C418	87-010-405-040		CAP,E 10-50 M SME
C501	87-010-319-080		C-CAP,S 56P-50 J CH
C502	87-010-319-080		C-CAP,S 56P-50 J CH
C503	87-012-393-080		C-CAP,S 0.22-16 K W5R CM/CB
C504	87-010-197-080		C-CAP,S 0.01-25 KB
C505	87-010-180-080		C-CAP,S 1500P-50 KB
C506	87-010-213-080		C-CAP,S 0.015-25 KB
C507	87-010-213-080		C-CAP,S 0.015-25 KB
C508	87-010-197-080		C-CAP,S 0.01-25 KB
C509	87-010-181-080		C-CAP,S 1800P-50 KB
C510	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C511	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C512	87-010-374-040		CAP,E 47-10 SME
C513	87-010-401-040		CAP,E 1-50 M SME
C514	87-010-401-040		CAP,E 1-50 M SME
C515	87-010-183-080		C-CAP,S 2700P-50 KB
C516	87-010-183-080		C-CAP,S 2700P-50 KB
C518	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C519	87-010-263-040		CAP,E 100-10 M SME
C533	87-010-545-040		CAP,E 0.22-50 M SME
C601	87-010-405-040		CAP,E 10-50 M SME
C602	87-010-186-080		C-CAP,S 4700P-50 KB
C603	87-010-405-040		CAP,E 10-50 M SME
C604	87-010-382-040		CAP,E 22-25 SME
C605	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C607	87-010-321-080		C-CAP,S 82P-50 J CH
C608	87-010-196-080		C-CAP,S 0.1-25 ZF C2012
C609	87-010-545-040		CAP,E 0.22-50 M SME
C611	87-010-177-080		C-CAP,S 820P-50 J SL
C614	87-010-248-040		CAP,E 220-10 M SME
FB601	87-008-372-080		FLTR,EMIBL01 RN1
FC104	85-NF5-615-010		CABLE,FFC 15P-1.25
FC301	85-NF5-617-010		CABLE,FFC 6P-1.25
FC102	85-NF5-618-010		CABLE,FFC 13P-1.25
FL101	87-NF4-640-010		FL,BJ529GK
J601	87-A60-284-010		JACK,3.5MO(MSC)
J602	87-A60-284-010		JACK,3.5MO(MSC)
L501	87-005-448-080		COIL,220UH K FLR50
LED201	87-A40-317-080		LED,SLR-342VCT31 RED
LED202	87-A40-317-080		LED,SLR-342VCT31 RED
LED203	87-A40-317-080		LED,SLR-342VCT31 RED
LED204	87-A40-317-080		LED,SLR-342VCT31 RED
LED205	87-A40-317-080		LED,SLR-342VCT31 RED
LED206	87-A40-316-080		LED,SLR-56PCT31 GRN
LED207	87-A40-316-080		LED,SLR-56PCT31 GRN
LED208	87-A40-316-080		LED,SLR-56PCT31 GRN
LED209	87-A40-316-080		LED,SLR-56PCT31 GRN
LED210	87-A40-316-080		LED,SLR-56PCT31 GRN
LED211	87-A40-316-080		LED,SLR-56PCT31 GRN
LED212	87-A40-316-080		LED,SLR-56PCT31 GRN
LED213	87-A40-316-080		LED,SLR-56PCT31 GRN
LED214	87-A40-316-080		LED,SLR-56PCT31 GRN
LED215	87-A40-316-080		LED,SLR-56PCT31 GRN
LED216	87-A40-264-080		LED,SLH-56PCTE7 GRN

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED217	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED218	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED219	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED220	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED221	87-A40-264-080		LED,SLH-56PCTE7 GRN
LED233	87-A40-265-010		LED,SLH-56PCL GRN
LED234	87-A40-265-010		LED,SLH-56PCL GRN
LED235	87-A40-267-010		LED,SLH-56VCL RED
LED236	87-A40-267-010		LED,SLH-56VCL RED
LED237	87-A40-265-010		LED,SLH-56PCL GRN
LED238	87-A40-265-010		LED,SLH-56PCL GRN
S300	87-A90-095-080		SW,TACT EVQ11G04M
S302	87-A90-095-080		SW,TACT EVQ11G04M
S303	87-A90-095-080		SW,TACT EVQ11G04M
S304	87-A90-095-080		SW,TACT EVQ11G04M
S305	87-A90-095-080		SW,TACT EVQ11G04M
S306	87-A90-095-080		SW,TACT EVQ11G04M
S307	87-A90-095-080		SW,TACT EVQ11G04M
S308	87-A90-095-080		SW,TACT EVQ11G04M
S314	87-A90-095-080		SW,TACT EVQ11G04M
S315	87-A90-095-080		SW,TACT EVQ11G04M
S316	87-A90-095-080		SW,TACT EVQ11G04M
S317	87-A90-095-080		SW,TACT EVQ11G04M
S318	87-A90-095-080		SW,TACT EVQ11G04M
S319	87-A90-095-080		SW,TACT EVQ11G04M
S320	87-A90-095-080		SW,TACT EVQ11G04M
S322	87-A90-095-080		SW,TACT EVQ11G04M
S326	87-A90-095-080		SW,TACT EVQ11G04M
S327	87-A90-095-080		SW,TACT EVQ11G04M
S328	87-A90-095-080		SW,TACT EVQ11G04M
S329	87-A90-095-080		SW,TACT EVQ11G04M
S330	87-A90-095-080		SW,TACT EVQ11G04M
S331	87-A90-095-080		SW,TACT EVQ11G04M
S332	87-A90-095-080		SW,TACT EVQ11G04M
S341	87-A90-095-080		SW,TACT EVQ11G04M
SW101	87-A90-471-010		SW,RTRY EC16B24304-25 NON
X101	87-A70-070-080		VIB,CER 5.76MHZ CRHF

KEY C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
LED230	87-A40-317-080		LED,SLR-342VCT31 RED
LED231	87-A40-317-080		LED,SLR-342VCT31 RED
LED232	87-A40-317-080		LED,SLR-342VCT31 RED
S309	87-A90-095-080		SW,TACT EVQ11G04M
S310	87-A90-095-080		SW,TACT EVQ11G04M
S311	87-A90-095-080		SW,TACT EVQ11G04M
S312	87-A90-095-080		SW,TACT EVQ11G04M
S313	87-A90-095-080		SW,TACT EVQ11G04M

FAN C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C130	87-010-401-080		CAP,E 1-50 M SME
C131	87-010-263-080		CAP,E 100-10 SME
C132	87-010-380-080		CAP,E 47-16 M SME
RY103	87-A90-143-010		RELAY, DG12D2-OS(M)

AC1 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
! F101	87-035-494-010		FUSE,10A 125V T 237
! FC1	87-A90-505-080		FUSE CLAMP,TP00351-5
! FC2	87-A90-505-080		FUSE CLAMP,TP00351-5
! PT101	87-NFR-631-010		PT,7NF-R U
! T1	87-A60-317-010		TERMINAL,1P MSC
! T2	87-A60-317-010		TERMINAL,1P MSC

AC2 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
! PR1	87-026-691-080		FUSE,10A 125V 251
! PR2	87-026-691-080		FUSE,10A 125V 251
! PR3	87-026-690-080		FUSE,5A 125V 251
! PR4	87-026-690-080		FUSE,5A 125V 251
! PR5	87-026-691-080		FUSE,10A 125V 251
! PR6	87-026-691-080		FUSE,10A 125V 251

DECK C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
CON502	87-099-756-010		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-618-310		SOL ASSY,27
SOL2	82-ZM1-618-310		SOL ASSY,27
SW1	87-036-110-010		SW,MICRO SPPB62
SW2	87-036-110-010		SW,MICRO SPPB62
SW3	87-036-110-010		SW,MICRO SPPB62
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW6	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75

HEAD-1 C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-602-010		PWB,FLEX I

HEAD-2 C.B

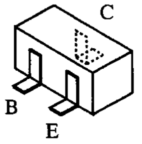
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
	85-ZM3-602-010		PWB,FLEX I
CON351	83-NEG-608-010		CONN ASSY,8P-RPB

PRO C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C101	87-012-368-080		C-CAP,S 0.1-50 F
C102	87-012-368-080		C-CAP,S 0.1-50 F
C103	87-010-398-090		CAP,E 2200-35V
C104	87-010-398-090		CAP,E 2200-35V
C106	87-010-382-080		CAP, ELECT 22-25V
C109	87-016-369-080		C-CAP,S 0.033-25 B K
C110	87-010-194-080		CAP, CHIP 0.047
C112	87-010-196-080		CHIP CAPACITOR,0.1-25
C201	87-010-186-080		CAP,CHIP 4700P
C202	87-010-402-080		CAP, ELECT 2.2-50V
C204	87-010-405-080		CAP, ELECT 10-50V
C205	87-A10-596-080		C-CAP,S 100P-100 J CH
C208	87-010-260-080		CAP, ELECT 47-25V
C209	87-010-993-080		C-CAP,S 0.056-25 B
C210	87-010-196-080		CHIP CAPACITOR,0.1-25
C211	87-010-197-080		CAP, CHIP 0.01 DM
C212	87-010-196-080		CHIP CAPACITOR,0.1-25
C213	87-010-406-080		CAP, ELECT 22-50
C301	87-010-183-080		C-CAP,S 2700P-50 B
C302	87-010-402-080		CAP, ELECT 2.2-50V
C304	87-010-382-080		CAP, ELECT 22-25V
C305	87-A10-596-080		C-CAP,S 100P-100 J CH
C308	87-010-260-080		CAP, ELECT 47-25V
C309	87-010-993-080		C-CAP,S 0.056-25 B
C310	87-010-196-080		CHIP CAPACITOR,0.1-25
C311	87-010-197-080		CAP, CHIP 0.01 DM
C312	87-010-196-080		CHIP CAPACITOR,0.1-25
C313	87-010-406-080		CAP, ELECT 22-50
C501	87-010-176-080		C-CAP,S 680P-50 SL
C502	87-010-176-080		C-CAP,S 680P-50 SL
C507	87-016-456-080		CAP,E 22-16 LLA
C508	87-010-196-080		CHIP CAPACITOR,0.1-25
C509	87-010-112-080		CAP, ELECT 100-16V
C510	87-010-380-080		CAP, ELECT 47-16V
C512	87-016-472-080		CAP,E 22-16 SME(K)
C513	87-010-196-080		CHIP CAPACITOR,0.1-25
C514	87-010-263-080		CAP, ELECT 100-10V
C517	87-010-314-080		C-CAP,S 22P-50 J CH
C518	87-010-378-080		CAP, ELECT 10-16V

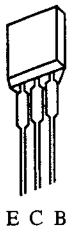
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C519	87-010-404-080		CAP, ELECT 4.7-50V
C520	87-010-404-080		CAP, ELECT 4.7-50V
C522	87-010-378-080		CAP, ELECT 10-16V
C523	87-010-400-080		CAP, ELECT 0.47-50V
C524	87-016-081-080		C-CAP,S 0.1-16 RK
C525	87-010-248-080		CAP, ELECT 220-10V
C526	87-012-140-080		CAP CHIP 470P
C527	87-010-186-080		CAP,CHIP 4700P
C528	87-010-186-080		CAP,CHIP 4700P
C529	87-010-404-080		CAP, ELECT 4.7-50V
C532	87-A10-229-080		C-CAP,S 0.68-10 K W5
C533	87-012-393-080		C-CAP,S 0.22-16 R K
C534	87-012-393-080		C-CAP,S 0.22-16 R K
C535	87-010-404-080		CAP, ELECT 4.7-50V
C536	87-010-404-080		CAP, ELECT 4.7-50V
C537	87-012-393-080		C-CAP,S 0.22-16 R K
C538	87-012-393-080		C-CAP,S 0.22-16 R K
C539	87-016-081-080		C-CAP,S 0.1-16 RK
C542	87-016-081-080		C-CAP,S 0.1-16 RK
C543	87-016-081-080		C-CAP,S 0.1-16 RK
C546	87-016-081-080		C-CAP,S 0.1-16 RK
C602	87-010-314-080		C-CAP,S 22P-50 J CH
C604	87-016-460-080		C-CAP,S 0.22-16 BK
C605	87-016-460-080		C-CAP,S 0.22-16 BK
C606	87-016-526-080		C-CAP,S 0.47-16 BK
C607	87-010-183-080		C-CAP,S 2700P-50 KB
C608	87-010-176-080		C-CAP,S 680P-50 J SL
C609	87-016-552-080		C-CAP,S 0.082-16 KB
C610	87-016-552-080		C-CAP,S 0.082-16 KB
C611	87-010-183-080		C-CAP,S 2700P-50 KB
C612	87-010-176-080		C-CAP,S 680P-50 J SL
C613	87-A10-201-080		C-CAP,S 0.33-16 KB
C615	87-010-263-080		CAP, ELECT 100-10V
C616	87-010-404-080		CAP, ELECT 4.7-50V
C618	87-010-263-080		CAP, ELECT 100-10V
C621	87-010-403-080		CAP, ELECT 3.3-50V
C622	87-A10-201-080		C-CAP,S 0.33-16 BK
C623	87-010-196-080		C-CAP,S 0.1-25 ZF
C701	87-010-401-080		CAP, ELECT 1-50V
C702	87-010-401-080		CAP, ELECT 1-50V
C703	87-010-263-080		CAP, ELECT 100-10V
C706	87-010-314-080		C-CAP,S 22P-50 J CH
C707	87-016-526-080		C-CAP,S 0.47-16 BK
C708	87-016-526-080		C-CAP,S 0.47-16 BK
C709	87-010-380-080		CAP, ELECT 47-16V
J201	87-A60-380-010		JACK,PIN 3P O/W/R YKC21-3
L201	87-003-383-010		COIL,1UH-S
L301	87-003-383-010		COIL,1UH-S
R215	87-A00-257-080		RES,M/F 0.15-1W J
R315	87-A00-257-080		RES,M/F 0.15-1W J
R524	87-022-365-080		C-RES,S 100K-1/10W F

TRANSISTOR ILLUSTRATION

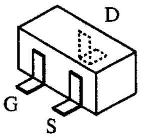


2SA1235
2SC2714
2SC3052
CMBT5551
CSA1362
CSD1306

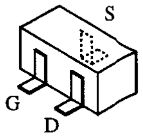
DTA144
RN1410
RT1N141C
RT1N144C
RT1P141C
RT1P144C



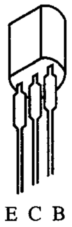
2SA933



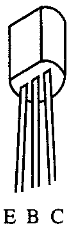
2SK2158



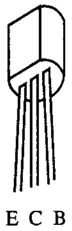
2SK543



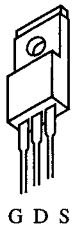
KTA1266
KTC3198



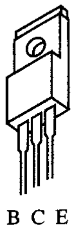
C2N5401



CSD1489
CSB1058



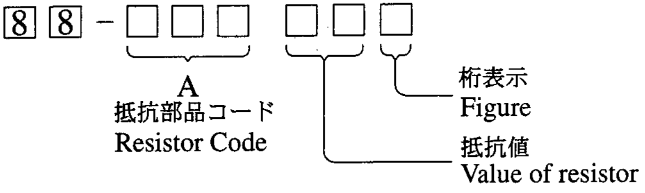
2SK2723



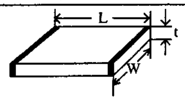
2SB1370
2SD2061
FN1016
FP1016

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

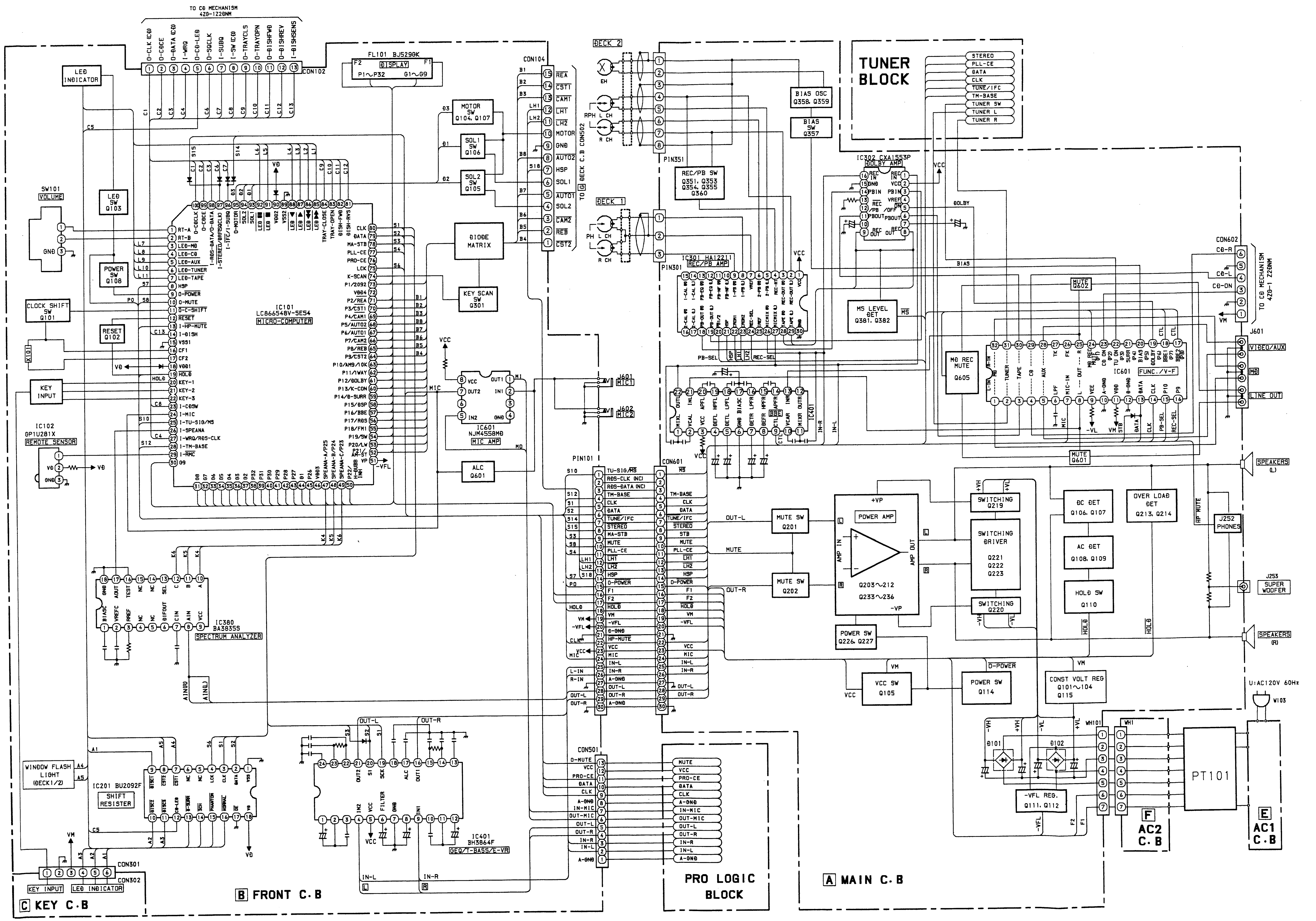
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



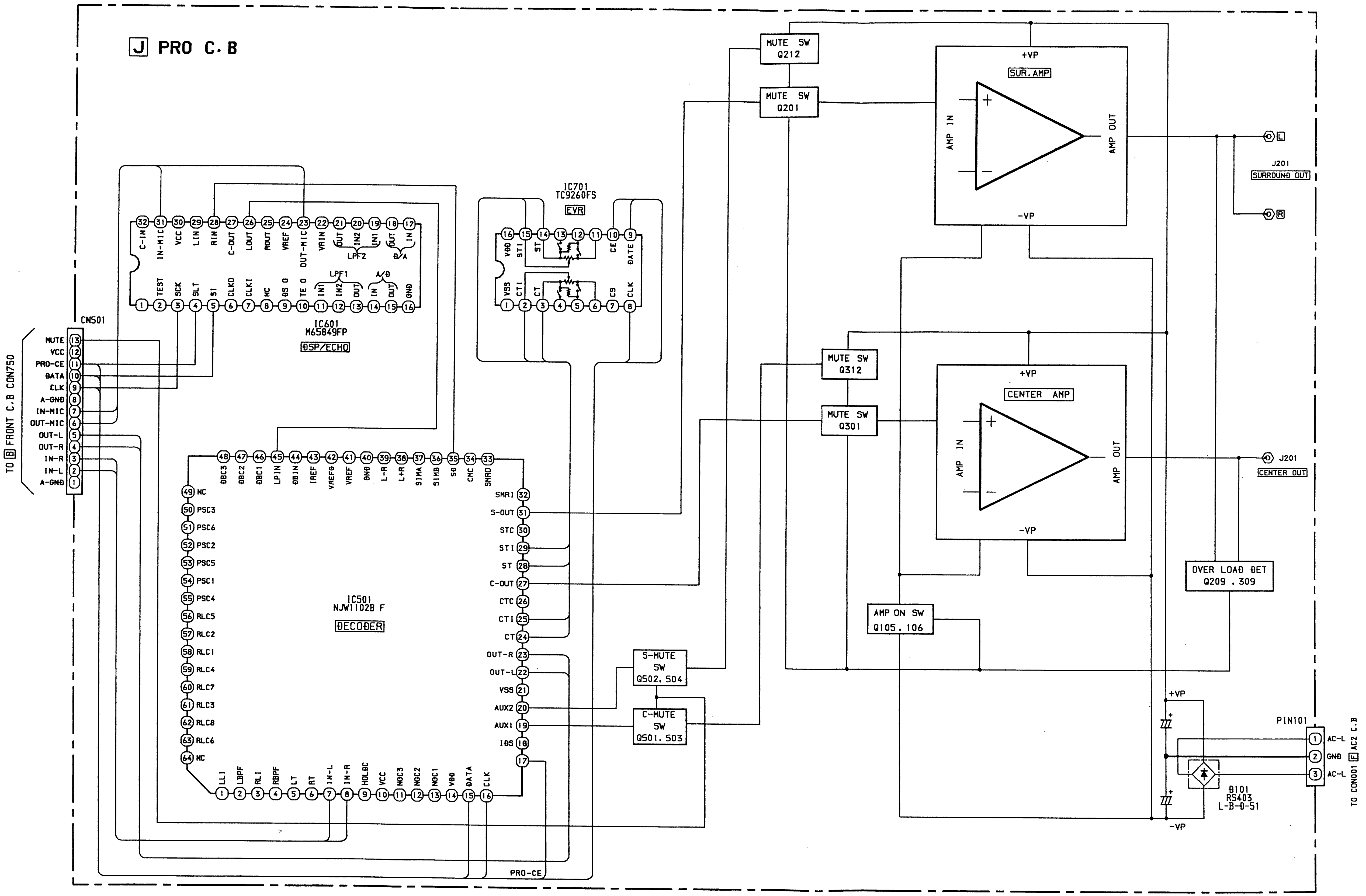
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード :A Resistor Code :A
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

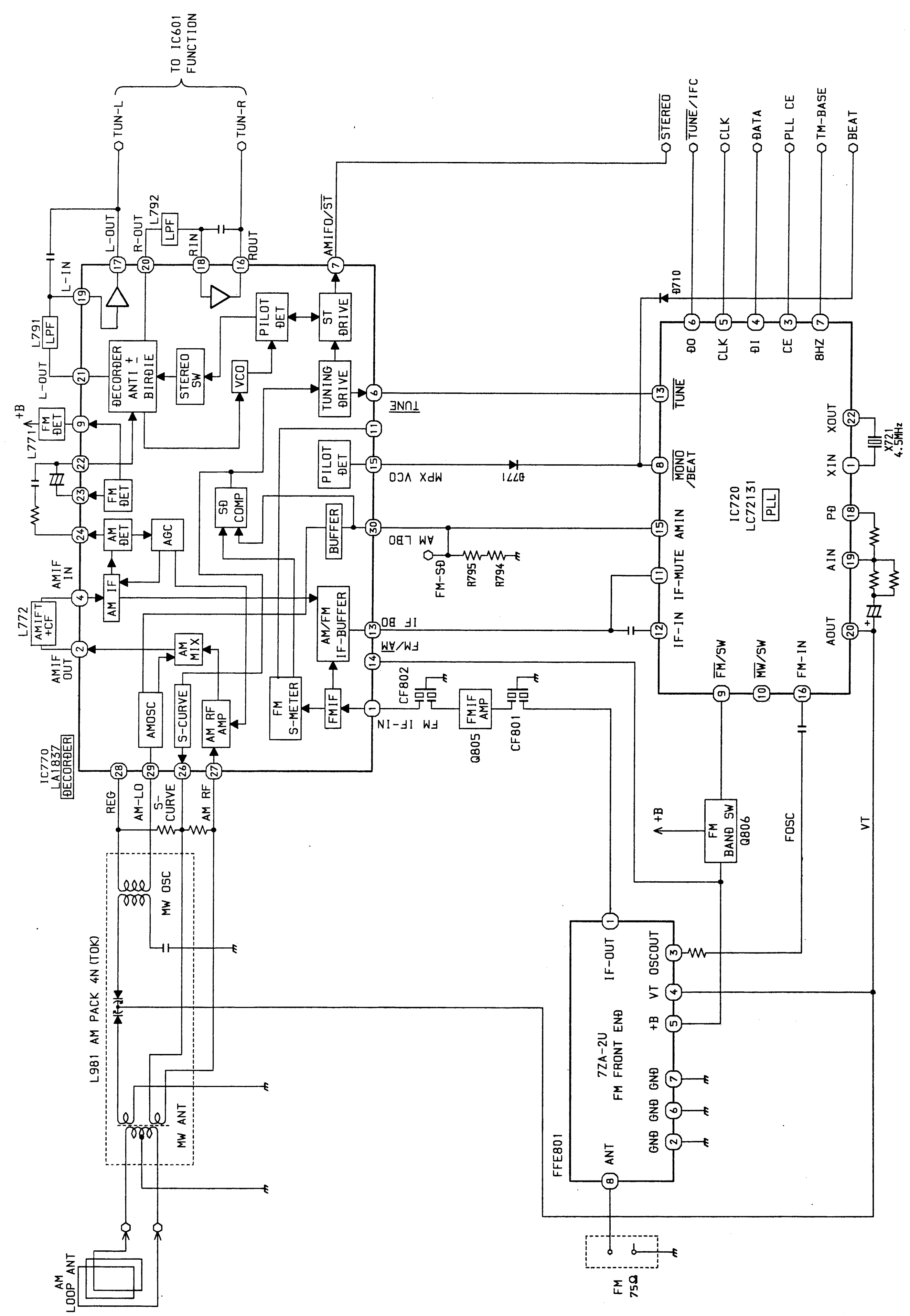
BLOCK DIAGRAM – 1 (MAIN / FRONT)


TO CD MECHANISM
4Z0-1Z20NM
CON102
LED INDICATOR
FL101 BJ5290K
DISPLAY
P1~P32
G1~G9
CON104
MOTOR SW
Q104, Q107
SOL1 SW
Q106
SOL2 SW
Q105
TO G DECK C.B CON502
DECK 2
DECK 1
EH
RPH L CH
R CH
PH L CH
PIN351
PIN301
BIAS OSC
Q358, Q359
BIAS SW
Q357
REC/PB SW
Q351, Q353
Q354, Q355
Q360
TUNER BLOCK
STEREO
PLL-CE
DATA
CLK
TUNE/IFC
TM-BASE
TUNER SW
TUNER L
TUNER R
IC302 CXA1553P
DOLBY AMP
DOLBY
IC301 HA12211
REC/PB AMP
MS LEVEL DET
Q381, Q382
MUTE
Q602
CON602
TO CD MECHANISM
4Z0-1Z20NM
SW101
VOLUME
LED SW
Q103
POWER SW
Q108
CLOCK SHIFT SW
Q101
RESET
Q102
X101
KEY INPUT
IC102
GP1U281X
REMOTE SENSOR
IC101
LC866548V-5E54
MICRO-COMPUTER
DIODE MATRIX
KEY SCAN SW
Q301
IC601
NJM4558MD
MIC AMP
J601
MIC1
J602
MIC2
ALC
Q601
MD REC MUTE
Q605
IC601
FUNC./V-F
IC401
MUTE
Q601
J601
VIDEO/AUX
MD
LINE OUT
PIN101
CON601
SPEAKERS (L)
SPEAKERS (R)
MUTE SW
Q201
MUTE SW
Q202
POWER AMP
AMP IN
AMP OUT
Q203~212
Q233~236
SWITCHING
Q219
SWITCHING DRIVER
Q221
Q222
Q223
SWITCHING
Q220
DC DET
Q106, Q107
AC DET
Q108, Q109
HOLD SW
Q110
OVER LOAD DET
Q213, Q214
J252
PHONES
J253
SUPER WOOFER
IC380
BA3835S
SPECTRUM ANALYZER
POWER SW
Q226, Q227
VCC SW
Q105
POWER SW
Q114
CONST VOLT REG
Q101~104
Q115
U:AC120V 60Hz
W103
WINDOW FLASH LIGHT
(DECK1/2)
IC201 BU2092F
SHIFT RESISTER
IC401
BH3864F
GEQ/T-BASS/E-VR
CON501
D101
D102
-VFL REG.
Q111, Q112
WH101
WH1
PT101
F
AC2
C.B
E
AC1
C.B
CON301
CON302
KEY INPUT
LED INDICATOR
C KEY C.B
B FRONT C.B
PRO LOGIC BLOCK
A MAIN C.B

BLOCK DIAGRAM – 2 (PRO – LOGIC)


J PRO C.B
IC601
M65849FP
DSP/ECHO
C-IN
IN-MIC
VCC
LIN
RIN
C-OUT
LOUT
ROUT
VREF
OUT-MIC
VRIN
LPF2
D/A
LPF1
A/D
TEST
SCK
SLT
SI
CLKO
CLKI
NC
DS O
TE O
IN1
IN2
OUT
IN
GND
IC701
TC9260FS
EVR
VDD
STI
ST
CE
DATE
VSS
CTI
CT
CS
CLK
CN501
TO B FRONT C.B CON750
MUTE
VCC
PRO-CE
DATA
CLK
A-GND
IN-MIC
OUT-MIC
OUT-L
OUT-R
IN-R
IN-L
A-GND
IC501
NJW1102B F
DECODER
DBC3
DBC2
DBC1
LPIN
DBIN
IREF
VREFG
VREF
GND
L-R
L+R
SIMA
SIMB
SO
CMC
SMRO
NC
PSC3
PSC6
PSC2
PSC5
PSC1
PSC4
RLC5
RLC2
RLC1
RLC4
RLC7
RLC3
RLC8
RLC6
NC
SMRI
S-OUT
STC
STI
ST
C-OUT
CTC
CTI
CT
OUT-R
OUT-L
VSS
AUX2
AUX1
IOS
LLI
LBPF
RLI
RBPF
LT
RT
IN-L
IN-R
HOLDC
VCC
NDC3
NDC2
NDC1
VDD
DATA
CLK
PRO-CE
MUTE SW
Q212
MUTE SW
Q201
+VP
SUR.AMP
AMP IN
AMP OUT
-VP
L
R
J201
SURROUND OUT
MUTE SW
Q312
MUTE SW
Q301
+VP
CENTER AMP
AMP IN
AMP OUT
-VP
J201
CENTER OUT
OVER LOAD DET
Q209 . 309
AMP ON SW
Q105 . 106
S-MUTE
SW
Q502. 504
C-MUTE
SW
Q501. 503
+VP
-VP
D101
RS403
L-B-D-51
PIN101
AC-L
GND
AC-L
TO CN001 F AC2 C.B

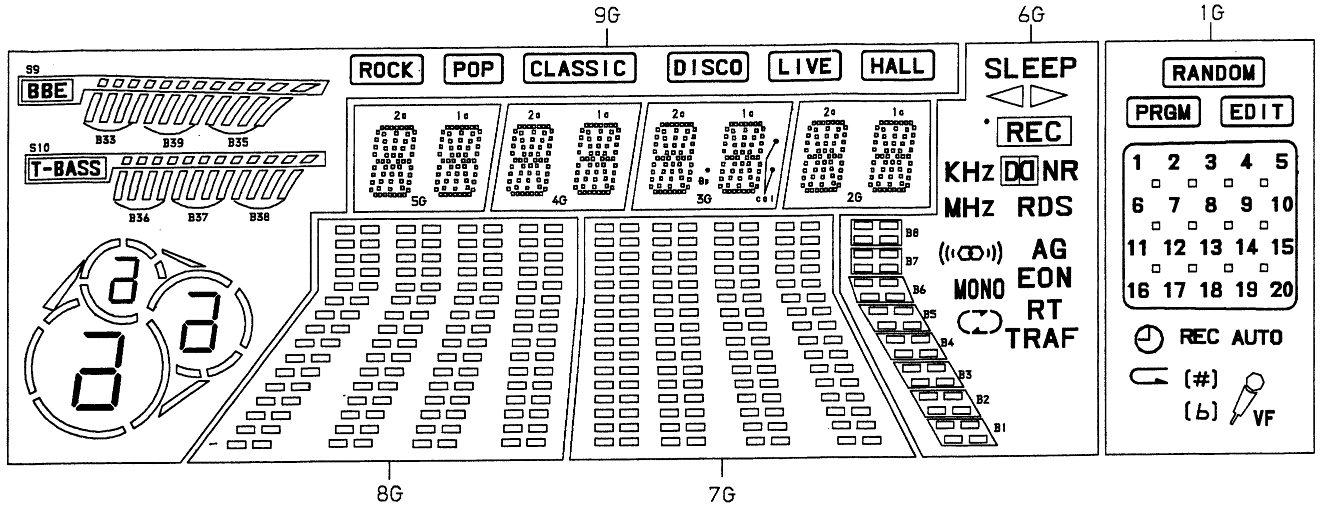
BLOCK DIAGRAM – 3 (TUNER)


TO IC601 FUNCTION
TUN-L
TUN-R
STEREO
TUNE/IFC
CLK
DATA
PLL CE
TM-BASE
BEAT
L-OUT
R-OUT
L792 LPF
RIN
ROUT
AMIFO/ST
L-IN
L791 LPF
L-OUT
DECODER ANTI + BIRDIE
STEREO SW
VCO
PILOT DET
ST DRIVE
TUNING DRIVE
TUNE
D710
DO
CLK
DI
CE
8HZ
XOUT
XIN
X721 4.5MHz
+B
L771
FM DET
FM DET
AM DET
AGC
SD COMP
PILOT DET
MPX VCO
D771
MONO /BEAT
BUFFER
AM LBO
FM-SD
R795
R794
AM IN
IC720 LC72131
PLL
PD
AIN
AMIF IN
L772 AMIFT +CF
AM IF
AM/FM IF-BUFFER
IF OD
IF-MUTE
IF-IN
FM/AM
AMIF OUT
AM MIX
AMOSC
S-CURVE
AM RF AMP
FM S-METER
FMIF
CF802
FM IF-IN
FMIF AMP
CF801
Q805
FM/SW
MW/SW
FM-IN
AOUT
IC770 LA1837 DECODER
REG
AM-LO
S-CURVE
AM RF
+B
FM BAND SW Q806
FOSC
VT
MW OSC
L981 AM PACK 4N (TOK)
IF-OUT
OSCOUT
VT
+B
7ZA-2U FM FRONT END
GND
GND
GND
ANT
FFE801
MW ANT
AM LOOP ANT
FM 75Ω

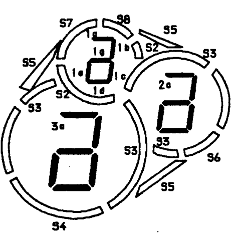
FL GRID ASSIGNMENT / ANODE CONNECTION

FL, BJ529GK

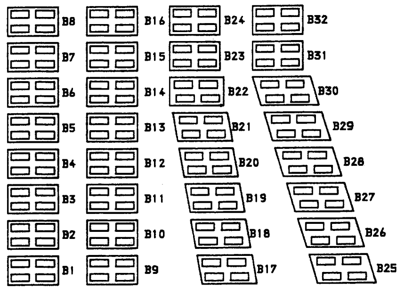
GRID ASSIGNMENT


9G
6G
1G
S9
BBE
S10
T-BASS
B33
B39
B35
B36
B37
B38
ROCK
POP
CLASSIC
DISCO
LIVE
HALL
SLEEP
REC
KHz
NR
MHz
RDS
AG
EON
MONO
RT
TRAF
RANDOM
PRGM
EDIT
1 2 3 4 5
6 7 8 9 10
11 12 13 14 15
16 17 18 19 20
REC AUTO
(#)
(b)
VF
5G
4G
3G
2G
B8
B7
B6
B5
B4
B3
B2
B1
8G
7G

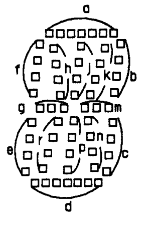
ANODE CONNECTION


S7
S8
S5
S3
S2
S4
S6
S3
S5
S4

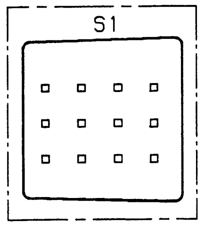
(9G)


B8
B7
B6
B5
B4
B3
B2
B1
B16
B15
B14
B13
B12
B11
B10
B9
B24
B23
B22
B21
B20
B19
B18
B17
B32
B31
B30
B29
B28
B27
B26
B25

(8G, 7G)



(5G ~ 2G)



(1B)

	9G	8G, 7G	6G	5G, 4G	3G	2G	1G
P1	S8	B32	▷	-	COL (DOWN)	-	RANDOM
P2	S2	B24	◁	1d	1d	1d	-
P3	1b	B16	SLEEP	1n	1n	1n	PRGM
P4	1c	B8	B8	1p	1p	1p	EDIT
P5	1e	B31	○	1r	1r	1r	1
P6	1a, 1d, 1g	B23	REC	1e	1e	1e	2
P7	2b	B15	KHz	1c	1c	1c	3
P8	2c	B7	B7	1g	1g	1g	4
P9	2e	B30	MHz	1m	1m	1m	5
P10	2a, 2d, 2g	B22	-	1f	1f	1f	6
P11	3b	B14	DD NR	1b	1b	1b	7
P12	3c	B6	B6	1k	1k	1k	8
P13	3e	B29	RDS	1j	1j	1j	9
P14	3a, 3d, 3g	B21	-	1h	1h	1h	10
P15	S3	B13	-	1a	1a	1a	11
P16	S5	B5	B5	-	col(UP)	-	12
P17	S7	B28	-	-	Dp	-	13
P18	S4	B20	-	2d	2d	2d	14
P19	S6	B12	-	2n	2n	2n	15
P20	▭ (HALL)	B4	B4	2p	2p	2p	16
P21	▭ (LIVE)	B27	AG	2r	2r	2r	17
P22	▭ (DISCO)	B19	(((DD)))	2e	2e	2e	18
P23	▭ (CLASSIC)	B11	EON	2c	2c	2c	19
P24	▭ (POP)	B3	B3	2g	2g	2g	20
P25	▭ (ROCK)	B26	RT	2m	2m	2m	AUTO
P26	B36	B18	MONO	2f	2f	2f	VF
P27	B37	B10	TRAF	2b	2b	2b	◷
P28	B38	B2	B2	2k	2k	2k	REC
P29	B33	B25	)	2j	2j	2j	↩
P30	B34	B17	⇄	2h	2h	2h	[ ] (#)
P31	B35	B9	(	2a	2a	2a	[ ] (b)
P32	ROCK POP CLASSIC S10	B1	B1	-	-	-	S1
P33	DISCO LIVE HALL	-	-	-	-	-	-
P34	S9	-	-	-	-	-	-
P35	-	-	-	-	-	-	b #

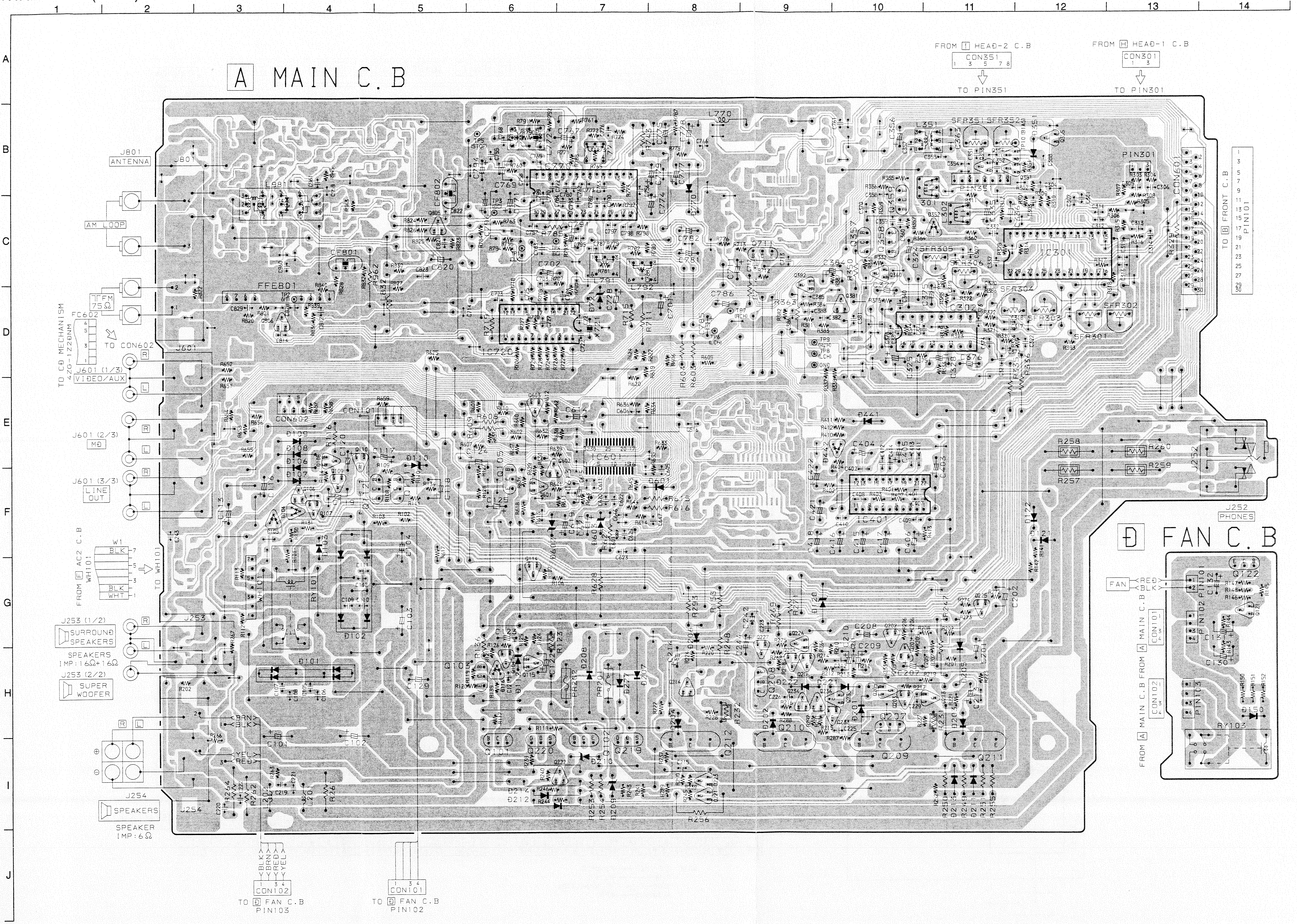
PIN CONNECTION

PIN NO.	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31
CONNECTION	F2	F2	F2	NP	NP	9G	8G	7G	6G	5G	4G	3G	2G	1G	NC	NC	NC	NC	NC	NC	NC	NC	NC	P35	P34	P33	P32	P31	P30	P29	P28	P27	P26

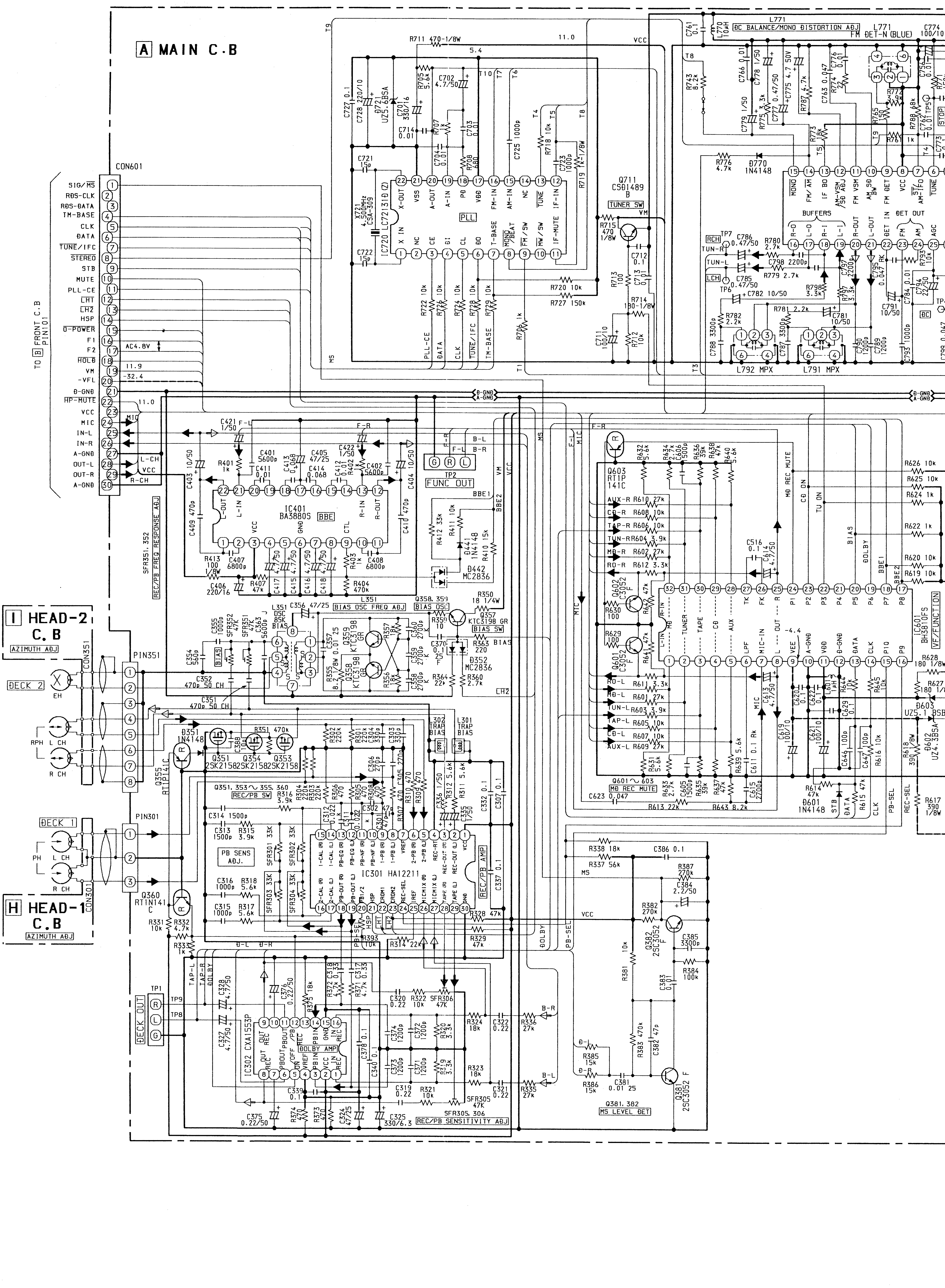
PIN NO.	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9	P8	P7	P6	P5	P4	P3	P2	P1	NP	NP	F1	F1	F1

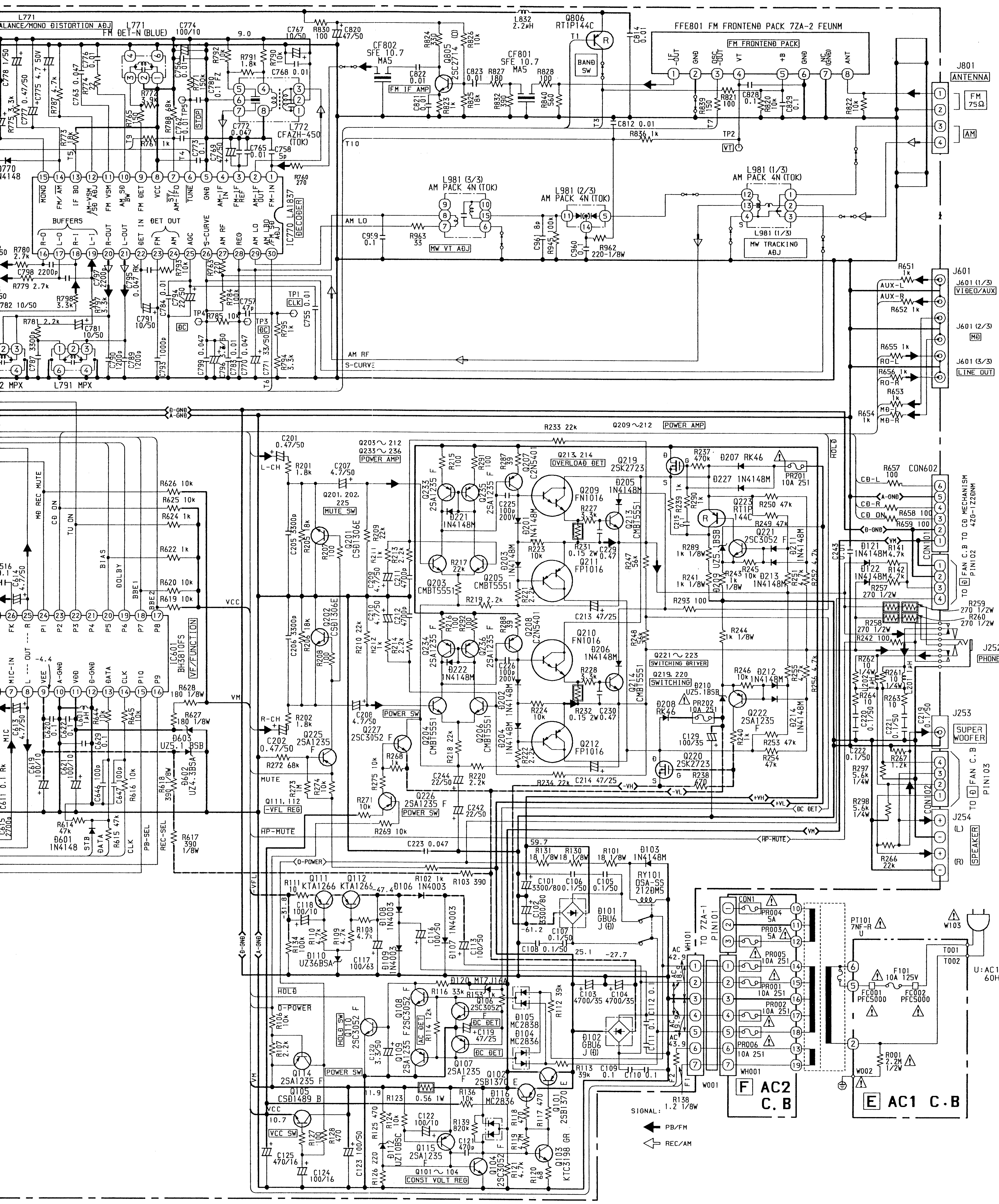
NOTE
1) F1, F2------FILAMENT
2) NP---------NO PIN
3) NC---------NO CONNECTION
4) 1G~9G------GRID

WIRING – 1 (MAIN)

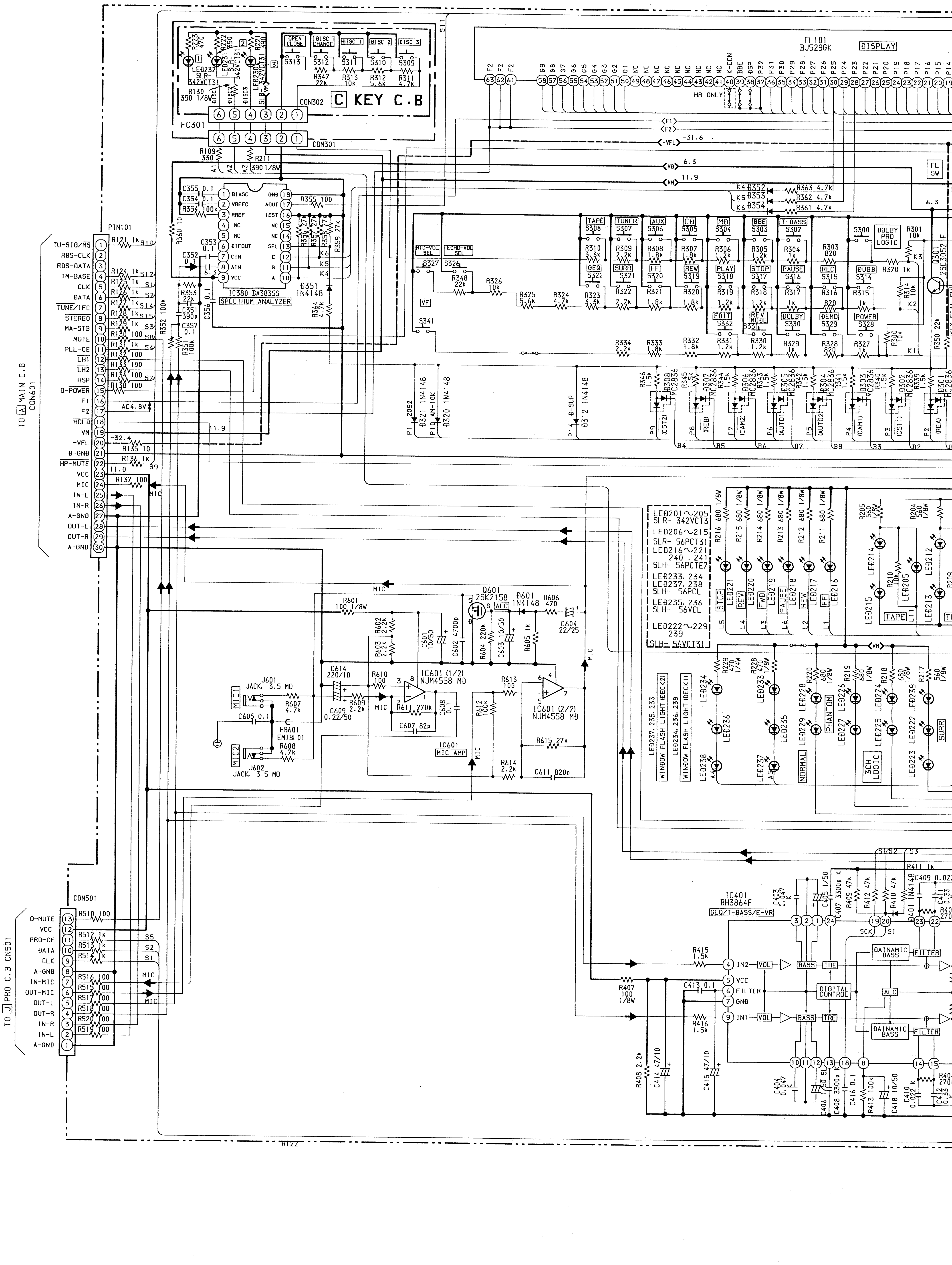

A MAIN C.B
Ð FAN C.B
FROM I HEAD-2 C.B
CON351
1 3 5 7 8
TO PIN351
FROM H HEAD-1 C.B
CON301
1 3
TO PIN301
J801
ANTENNA
AM LOOP
FM 75Ω
FC602
TO CD MECHANISM 4ZG-1Z26NM
TO CON602
J601 (1/3)
VIDEO/AUX
J601 (2/3)
MD
J601 (3/3)
LINE OUT
R
L
W1
BLK
WHT
FROM E AC2 C.B WH101
TO WH101
J253 (1/2)
SURROUND SPEAKERS
SPEAKERS IMP: 16Ω+16Ω
J253 (2/2)
SUPER WOOFER
J254
SPEAKERS
SPEAKER IMP: 6Ω
BRN
BLK
YEL
RED
BLK BRN RED YEL
CON102
1 3 4
TO Ð FAN C.B PIN103
CON101
1 3 4
TO Ð FAN C.B PIN102
TO B FRONT C.B PIN101
CON601
PIN301
J252
PHONES
FAN
RED
BLK
FROM A MAIN C.B CON101
FROM A MAIN C.B CON102
PIN102
PIN103
RY103
IC301
IC302
IC401
IC601
IC720
FFE801
CF801
CF802
L770
L351
SFR351
SFR352
SFR305
SFR306
SFR304
SFR302
SFR301
D101
D102
Q122
Q121
D150
R258
R260
R259
R257

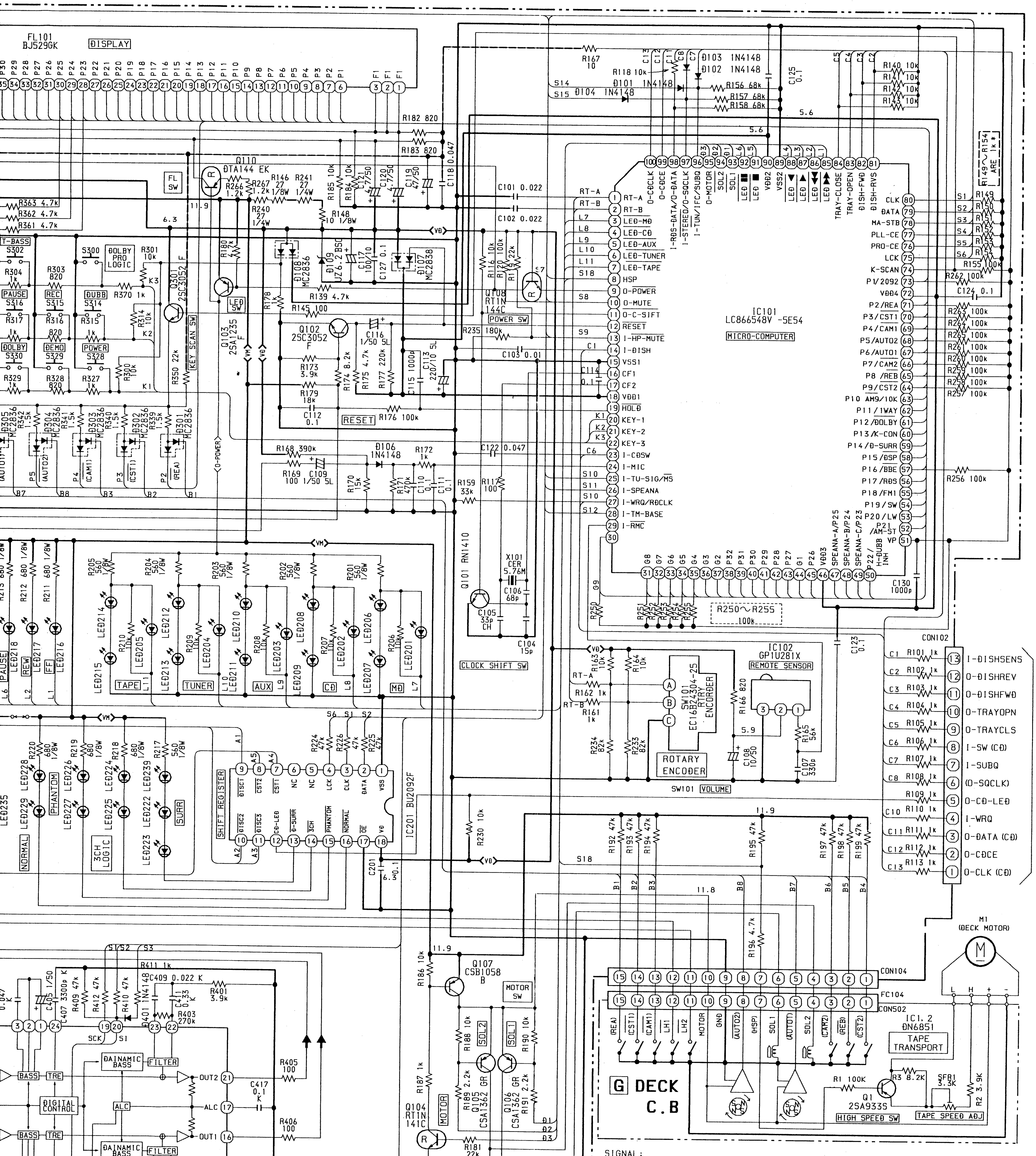
SCHEMATIC DIAGRAM – 1 (MAIN)


A MAIN C.B
CON601
TO B FRONT C.B PIN101
SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
AC4.8V
11.9
-32.4
11.0
L-CH
R-CH
VCC
PLL
IC720 LC72131D (Z)
X721 4.500MHz CSA-309
R711 470-1/8W
5.4
Q711 CSD1489 B
TUNER SW
DC BALANCE/MONO DISTORTION ADJ
L771 FM DET-N (BLUE)
BUFFERS
L792 MPX
L791 MPX
IC401 BA3880S BBE
REC/PB FREQ RESPONSE ADJ
SFR351, 352
FUNC OUT
TP2
BIAS OSC FREQ ADJ
BIAS OSC
BIAS SW
L351 OSC 85K BIAS
Q357 KTC3198 GR
Q358 KTC3198 GR
Q359 KTC3198 GR
D352 MC2836
D442 MC2836
I HEAD-2 C.B
AZIMUTH ADJ
DECK 2
EH
RPH L CH
R CH
PIN351
CON351
D351 1N4148
Q351 2SK2158
Q354 2SK2158
Q353 2SK2158
Q355 RT1P141C
Q351, 353~355, 360
REC/PB SW
L302 TRAP BIAS
L301 TRAP BIAS
IC301 HA12211
REC/PB AMP
PB SENS ADJ.
DECK 1
PH L CH
R CH
PIN301
CON301
H HEAD-1 C.B
AZIMUTH ADJ
Q360 RT1N141 C
IC302 CXA1553P
DOLBY AMP
DECK OUT
TP1
SFR305, 306
REC/PB SENSITIVITY ADJ
Q603 RT1P 141C
Q602 C3052
Q601 C3052
Q601~603
MD REC MUTE
D601 1N4148
IC601 BH3810FS
VF/FUNCTION
D603 UZ5.1BSB
D602 UZ4.3BSA
Q381, 382
MS LEVEL DET
Q382 2SC3052 F
Q381 2SC3052 F
MS
DOLBY
PB-SEL
REC-SEL
MD REC MUTE
CD ON
TU ON
BIAS
BBE1
BBE2
D-GND
A-GND

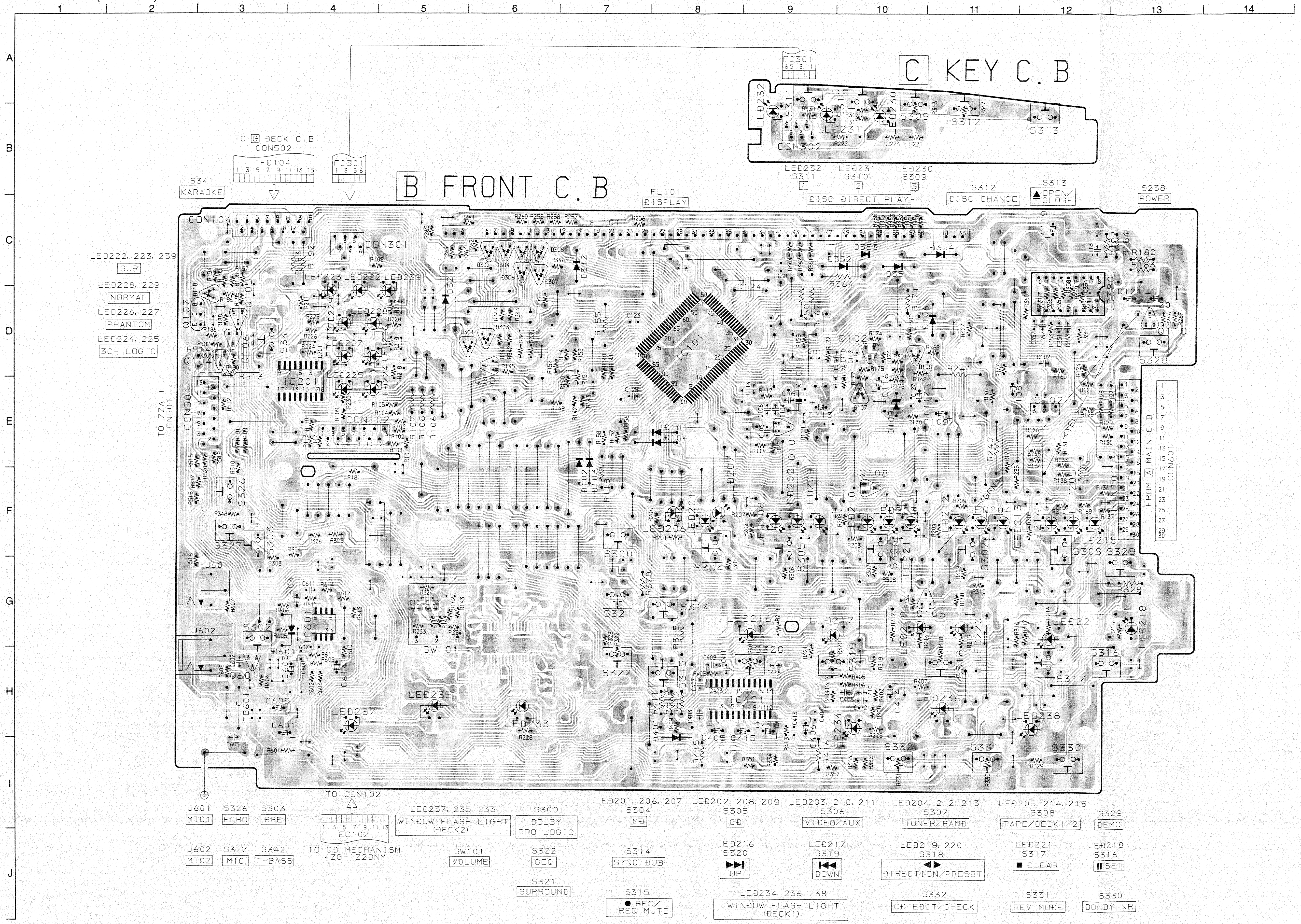

FFE801 FM FRONTEND PACK 7ZA-2 FEUNM
FM FRONTEND PACK
J801 ANTENNA
FM 75Ω
AM
CF802 SFE 10.7 MA5
CF801 SFE 10.7 MA5
FM IF AMP
Q805 2SC2714
Q806 RT1P144C
BAND SW
L771 FM DET-N (BLUE)
L772 CFAZH-450 (TOK)
IC770 LA1837 DECODER
BUFFERS
L791 MPX
L981 (1/3) AM PACK 4N (TOK)
L981 (2/3) AM PACK 4N (TOK)
L981 (3/3) AM PACK 4N (TOK)
MW VT ADJ
MW TRACKING ADJ
AM LO
AM RF
S-CURVE
J601 (1/3) VIDEO/AUX
AUX-L
AUX-R
J601 (2/3) MD
J601 (3/3) LINE OUT
RO-L
RO-R
MD-L
MD-R
CON602 TO CD C.B TO CD MECHANISM 4ZG-1Z2DNM
CON101 TO FAN C.B PIN102
IC601 BH3810FS VF/FUNCTION
Q203～212 Q233～236 POWER AMP
Q209～212 POWER AMP
Q201, 202, 225 MUTE SW
Q213, 214 OVERLOAD DET
Q219 2SK2723
Q209 FN1016
Q211 FP1016
Q210 FN1016
Q212 FP1016
Q221～223 SWITCHING DRIVER
Q219, 220 SWITCHING
Q220 2SK2723
PR201 10A 251
PR202 10A 251
J252 PHONES
J253 SUPER WOOFER
CON102 TO FAN C.B PIN103
J254 SPEAKER (L) (R)
Q111, 112 -VFL REG
POWER SW
HP-MUTE
D-POWER
RY101 OSA-SS 212DM5
D101 GBU6 J (D)
D102 GBU6 J (D)
HOLD SW
AC DET
DC DET
VCC SW
Q101～104 CONST VOLT REG
WH101 TO 7ZA-1 PIN101
F AC2 C.B
E AC1 C.B
PT101 7NF-R
F101 10A 125V
FC001 PFC5000
FC002 PFC5000
W103
U: AC120V, 60Hz
SIGNAL:
PB/FM
REC/AM

SCHEMATIC DIAGRAM – 2 (FRONT)

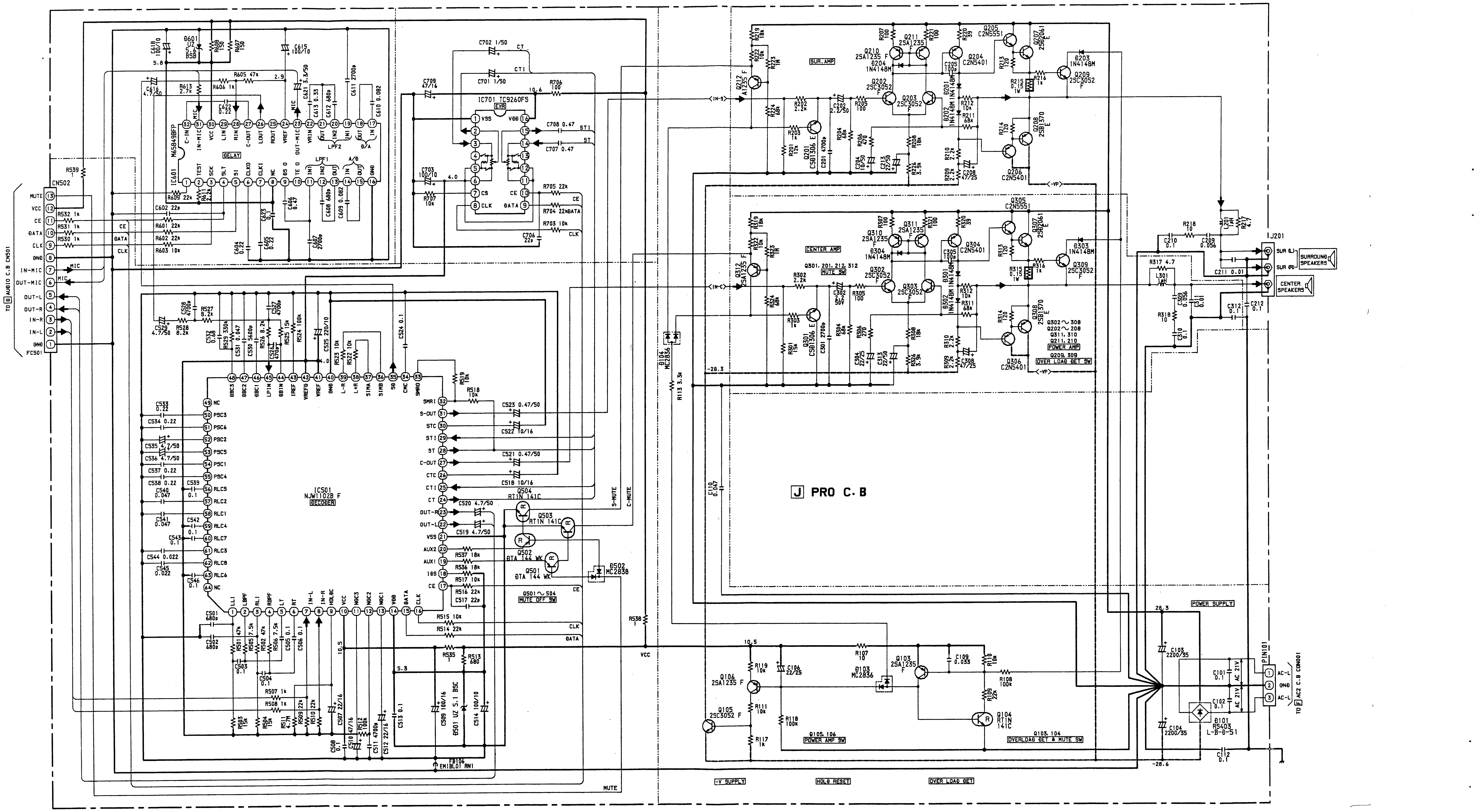

C KEY C.B
FC301
CON301
CON302
FL101
BJ529GK
DISPLAY
HR ONLY
FL SW
IC380 BA3835S
SPECTRUM ANALYZER
PIN101
TO A MAIN C.B CON601
TU-SIG/MS
RDS-CLK
RDS-DATA
TM-BASE
CLK
DATA
TUNE/IFC
STEREO
MA-STB
MUTE
PLL-CE
LH1
LH2
HSP
D-POWER
F1
F2
HOLD
VM
-VFL
D-GND
HP-MUTE
VCC
MIC
IN-L
IN-R
A-GND
OUT-L
OUT-R
A-GND
TAPE S308
TUNER S307
AUX S306
CD S305
MD S304
BBE S303
T-BASS S302
S300
DOLBY PRO LOGIC
GEQ S322
SURR S321
FF S320
REW S319
PLAY S318
STOP S317
PAUSE S316
REC S315
DUBB S314
EDIT S332
REV MODE S331
DOLBY S330
DEMO S329
POWER S328
MIC-VOL SEL
ECHO-VOL SEL
S327
S326
VF
S341
Q301 2SC3052
LED201～205 SLR-342VCT3
LED206～215 SLR-56PCT31
LED216～221 240, 241 SLH-56PCTE7
LED233, 234 LED237, 238 SLH-56PCL
LED235, 236 SLH-56VCL
LED222～229 239 SLH-56VCT31
WINDOW FLASH LIGHT (DECK2) LED237, 235, 233
WINDOW FLASH LIGHT (DECK1) LED234, 236, 238
NORMAL
PHANTOM
3CH LOGIC
SURR
TAPE
Q601 2SK2158 ALC
D601 1N4148
IC601 (1/2) NJM4558 MD
IC601 (2/2) NJM4558 MD
IC601 MIC AMP
J601 JACK 3.5 MD
J602 JACK 3.5 MD
MIC1
MIC2
FB601 EMIBL01
CON501
TO J PRO C.B CN501
D-MUTE
VCC
PRO-CE
DATA
CLK
A-GND
IN-MIC
OUT-MIC
OUT-L
OUT-R
IN-R
IN-L
A-GND
IC401 BH3864F
GEQ/T-BASS/E-VR
IN2
VCC
FILTER
GND
IN1
VOL
BASS
TRE
DIGITAL CONTROL
DAINAMIC BASS
ALC
FILTER
SCK
S1
R122


FL101
BJ529GK
DISPLAY
IC101
LC866548V -5E54
MICRO-COMPUTER
IC102
GP1U281X
REMOTE SENSOR
SW101
EC16B24304-25
ROTARY ENCODER
SW101 VOLUME
IC201 BU2092F
SHIFT REGISTER
X101 CER 5.76M
CLOCK SHIFT SW
RESET
POWER SW
KEY SCAN SW
LED SW
FL SW
MOTOR SW
TAPE
TUNER
AUX
CD
MD
NORMAL
PHANTOM
3CH LOGIC
SURR
DAINAMIC BASS
FILTER
DIGITAL CONTROL
ALC
BASS
TRE
CON102
I-DISHSENS
O-DISHREV
O-DISHFWD
O-TRAYOPN
O-TRAYCLS
I-SW (CD)
I-SUBQ
(O-SQCLK)
O-CD-LED
I-WRQ
O-DATA (CD)
O-CDCE
O-CLK (CD)
TO CD MECHANISM 4Z6-1
M1 (DECK MOTOR)
CON104
FC104
CON502
IC1, 2 DN6851
TAPE TRANSPORT
Q1 2SA933S
HIGH SPEED SW
TAPE SPEED ADJ
G DECK C.B
B FRONT C.B
SIGNAL:
PB

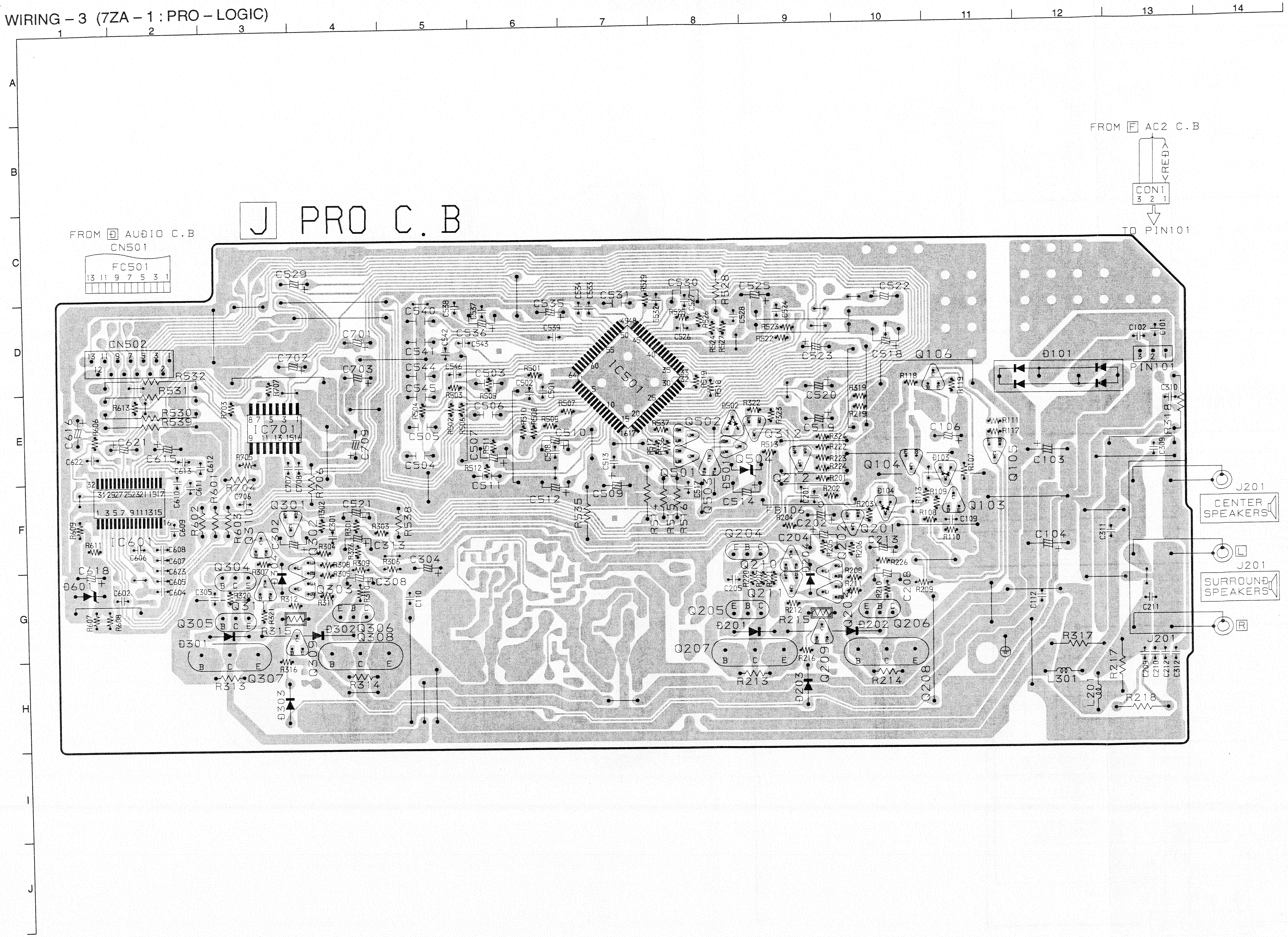
WIRING – 2 (FRONT)


C KEY C.B
B FRONT C.B
FC301
TO G DECK C.B CON502
FC104
S341 KARAOKE
LED222, 223, 239 SUR
LED228, 229 NORMAL
LED226, 227 PHANTOM
LED224, 225 3CH LOGIC
TO 7ZA-1 CN501
CON501
CON104
CON301
CON102
IC101
IC201
IC401
IC601
FL101 DISPLAY
LED232 S311 1
LED231 S310 2
LED230 S309 3
DISC DIRECT PLAY
S312 DISC CHANGE
S313 ▲OPEN/CLOSE
S238 POWER
FROM A MAIN C.B CON601
J601 MIC1
S326 ECHO
S303 BBE
J602 MIC2
S327 MIC
S342 T-BASS
TO CON102
FC102
TO CD MECHANISM 4ZG-1Z2DNM
LED237, 235, 233 WINDOW FLASH LIGHT (DECK2)
SW101 VOLUME
S300 DOLBY PRO LOGIC
S322 GEQ
S321 SURROUND
LED201, 206, 207 S304 MD
S314 SYNC DUB
S315 ● REC/REC MUTE
LED202, 208, 209 S305 CD
LED216 S320 ▶▶I UP
LED203, 210, 211 S306 VIDEO/AUX
LED217 S319 I◀◀ DOWN
LED234, 236, 238 WINDOW FLASH LIGHT (DECK1)
LED204, 212, 213 S307 TUNER/BAND
LED219, 220 S318 ◀▶ DIRECTION/PRESET
S332 CD EDIT/CHECK
LED205, 214, 215 S308 TAPE/DECK1/2
LED221 S317 ■ CLEAR
S331 REV MODE
S329 DEMO
LED218 S316 II SET
S330 DOLBY NR

SCHEMATIC DIAGRAM – 3 (7ZA – 1 : PRO – LOGIC)


IC601 M65849BFP
DELAY
IC701 TC9260FS
EVR
IC501 NJW1102B F
DECODER
CN502
FC501
TO B AUDIO C.B CN501
MUTE
VCC
CE
DATA
CLK
GND
IN-MIC
OUT-MIC
OUT-L
OUT-R
IN-R
IN-L
SUR.AMP
CENTER AMP
Q301, 201, 212, 312
MUTE SW
Q302 ~ 308
Q202 ~ 208
Q311, 310
Q211, 210
POWER AMP
Q209, 309
OVER LOAD DET SW
J PRO C.B
J201
SURROUND SPEAKERS
CENTER SPEAKERS
POWER SUPPLY
PIN101
TO E AC2 C.B CON001
Q501 ~ 504
MUTE OFF SW
Q105, 106
POWER AMP SW
Q103, 104
OVERLOAD DET & MUTE SW
-V SUPPLY
HOLD RESET
OVER LOAD DET
S-MUTE
C-MUTE
VCC
MUTE

WIRING – 3 (7ZA – 1 : PRO – LOGIC)


1
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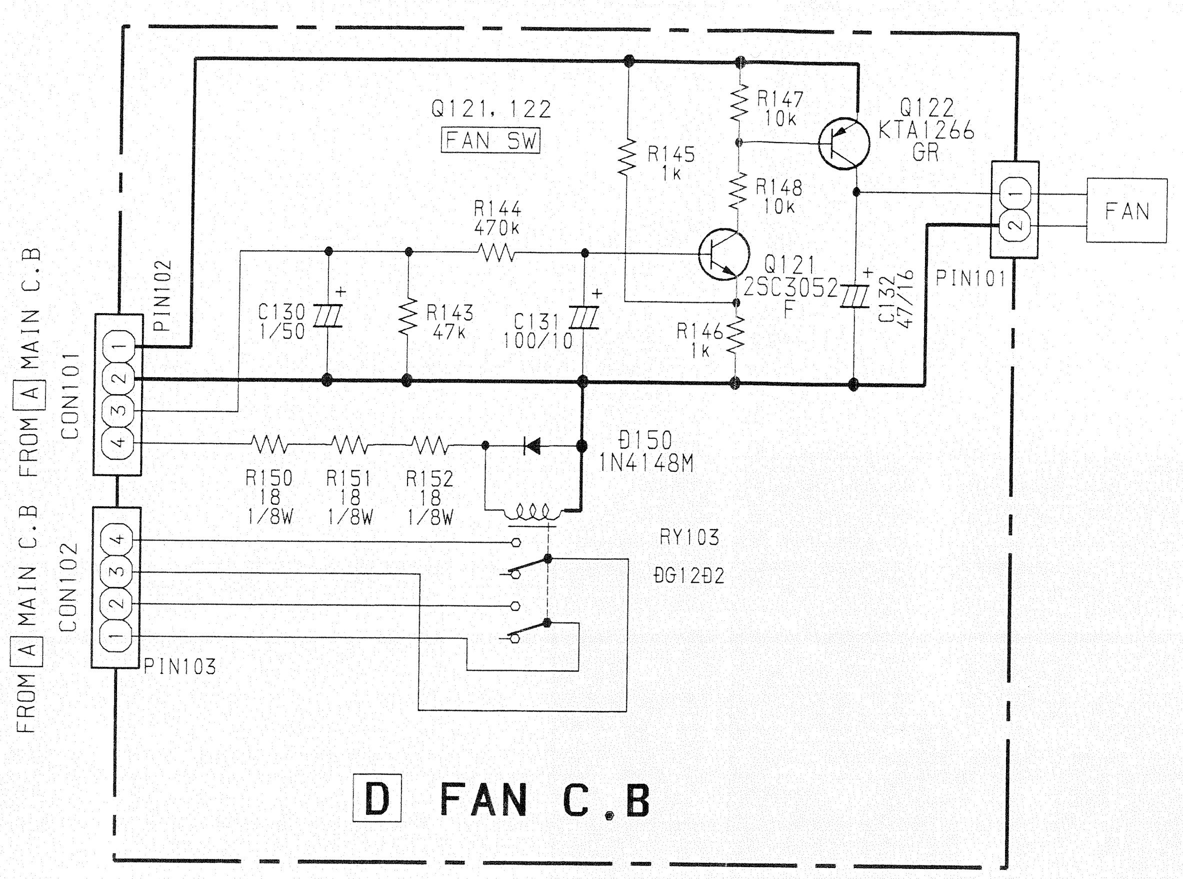
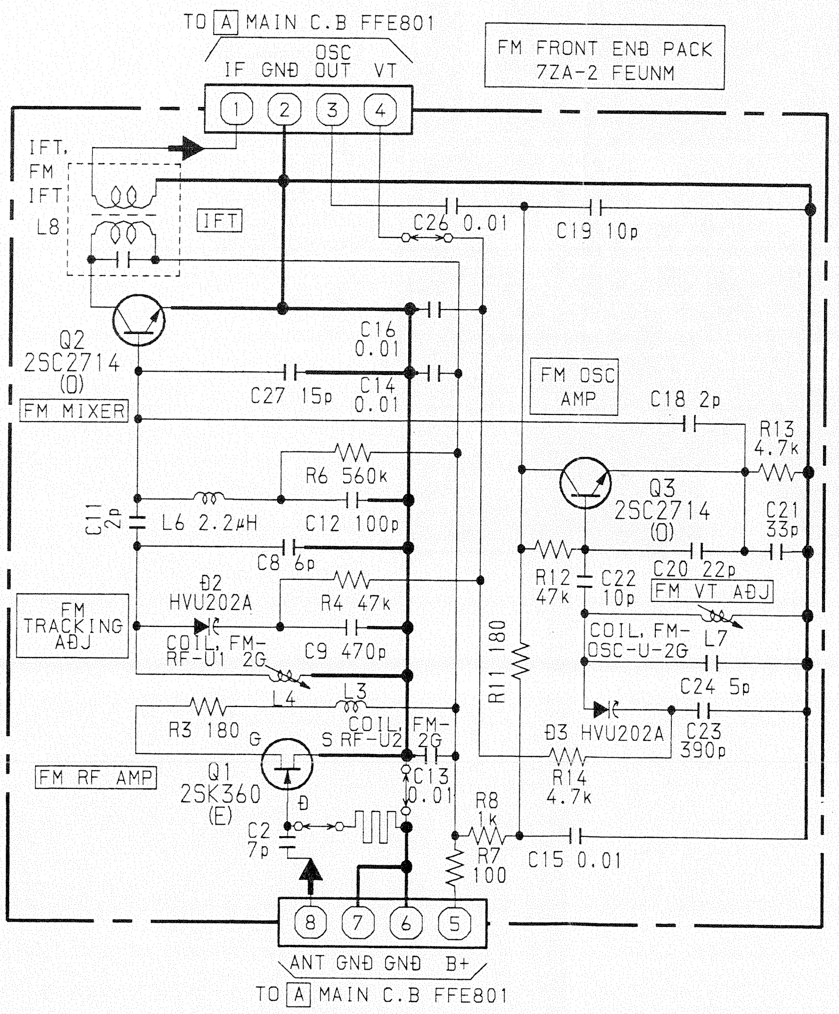
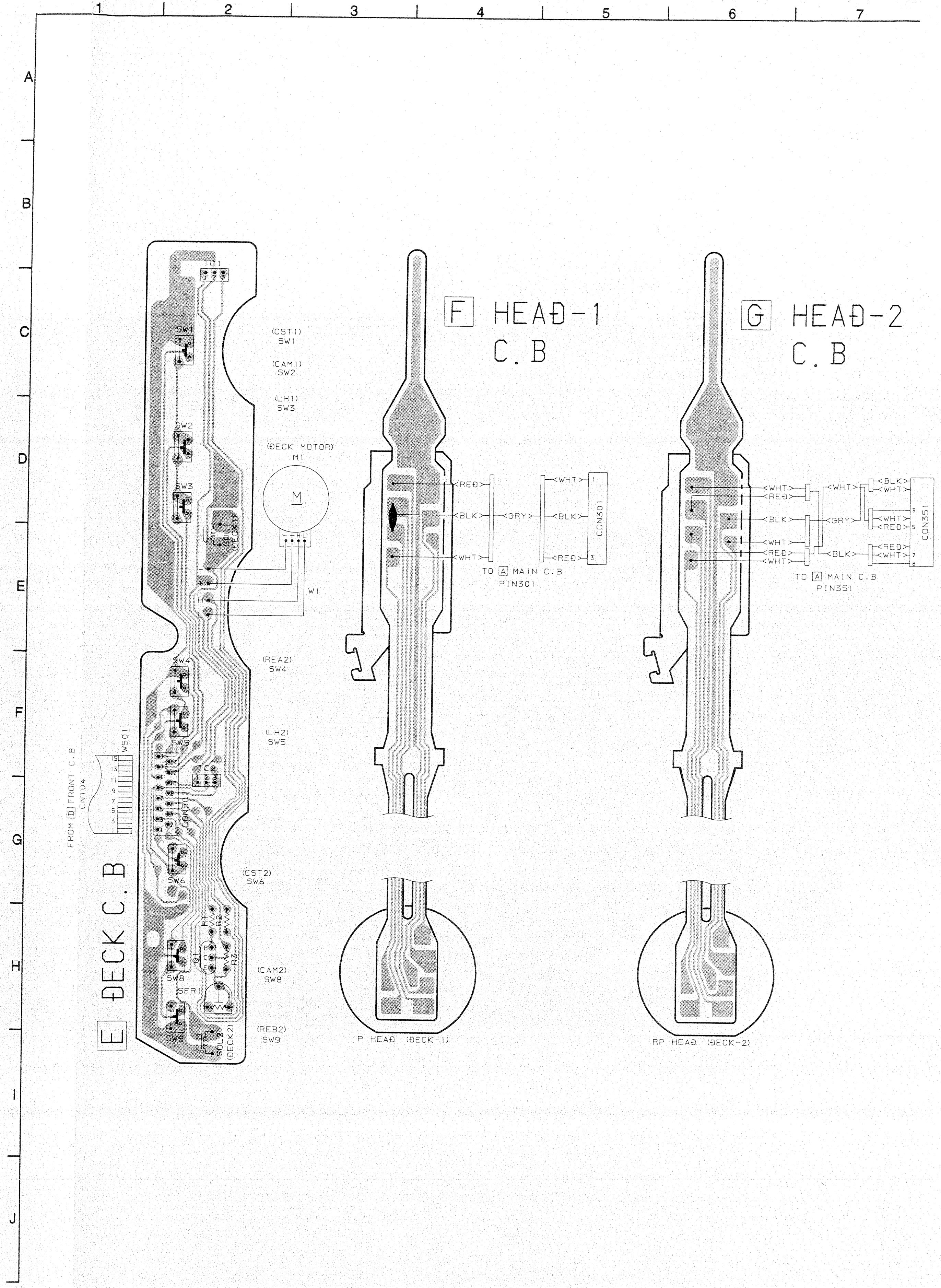
11
12
13
14
A
B
C
D
E
F
G
H
I
J
J PRO C.B
FROM D AUDIO C.B
CN501
FC501
13 11 9 7 5 3 1
CN502
IC701
IC501
IC601
FROM F AC2 C.B
<RED>
CON1
3 2 1
TO PIN101
PIN101
D101
Q106
Q104
Q103
Q105
J201
CENTER SPEAKERS
L
J201
SURROUND SPEAKERS
R
J201
Q201
Q202
Q204
Q205
Q206
Q207
Q208
Q209
Q210
Q211
Q301
Q302
Q303
Q304
Q305
Q306
Q307
Q308
Q309
Q310
Q311
Q312
Q501
Q502
Q503
Q504
D201
D202
D203
D301
D302
D303
D601
L201
L301
R317
R217
R218
R213
R214
R313
R314
R535
C103
C104
C106
C509
C512
C514
C520
C523
C518
C522
C525
C529
C530
C531
C701
C702
C703
C709
C616
C615
C618
C621

SCHEMATIC DIAGRAM – 4 (TUNER : 7ZA – 2 / FAN)

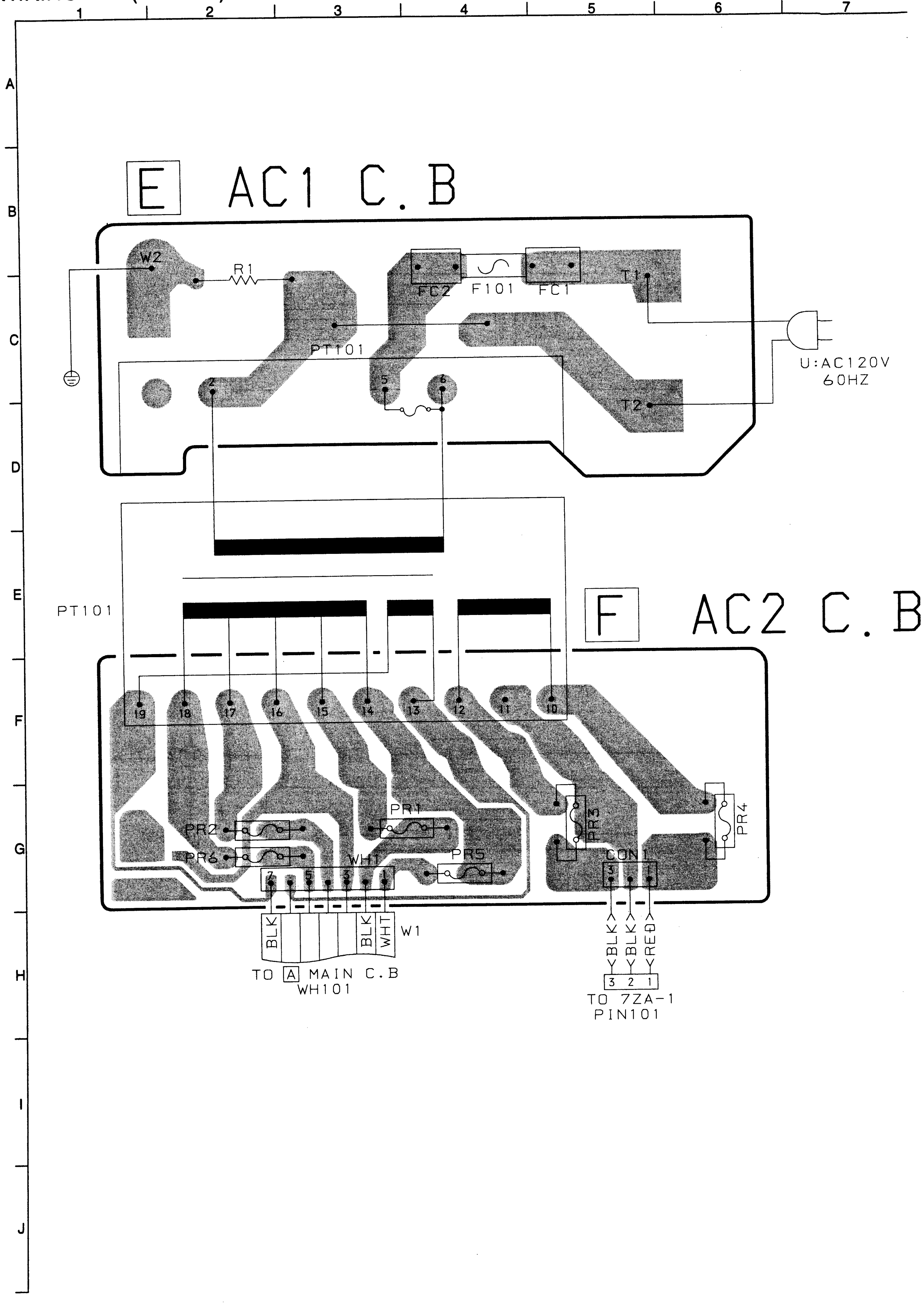

Q121, 122
FAN SW
Q122
KTA1266
GR
R147
10k
R145
1k
R148
10k
R144
470k
Q121
2SC3052
F
C130
1/50
R143
47k
C131
100/10
R146
1k
C132
47/16
PIN101
PIN102
FAN
FROM A MAIN C.B
CON101
D150
1N4148M
R150
18
1/8W
R151
18
1/8W
R152
18
1/8W
RY103
DG12D2
FROM A MAIN C.B
CON102
PIN103
D FAN C.B


TO A MAIN C.B FFE801
IF
GND
OSC OUT
VT
FM FRONT END PACK
7ZA-2 FEUNM
IFT, FM IFT
L8
IFT
C26 0.01
C19 10p
Q2
2SC2714
(O)
FM MIXER
C16
0.01
C27 15p
C14
0.01
FM OSC AMP
C18 2p
R13
4.7k
R6 560k
C11
2p
L6 2.2μH
C12 100p
Q3
2SC2714
(O)
C21
33p
C8 6p
D2
HVU202A
R4 47k
R12
47k
C22
10p
C20 22p
FM VT ADJ
FM TRACKING ADJ
COIL, FM-RF-U1 2G
C9 470p
R11 180
COIL, FM-OSC-U-2G
L7
C24 5p
L4
L3
R3 180
G
S
COIL, FM-RF-U2 2G
D3 HVU202A
C23
390p
FM RF AMP
Q1
2SK360
(E)
D
C13
0.01
R14
4.7k
C2
7p
R8
1k
R7
100
C15 0.01
ANT
GND
GND
B+
TO A MAIN C.B FFE801

WIRING – 4 (DECK)


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
IC1
SW1
(CST1)
SW1
(CAM1)
SW2
(LH1)
SW3
SW2
SW3
(DECK MOTOR)
M1
M
SOL1
(DECK1)
- + H L
W1
SW4
(REA2)
SW4
SW5
(LH2)
SW5
IC2
CON502
W501
FROM B FRONT C.B
CN104
SW6
(CST2)
SW6
R1
R2
R3
Q1
B
C
E
SW8
SFR1
(CAM2)
SW8
SW9
SOL2
(DECK2)
(REB2)
SW9
E DECK C.B
F HEAD-1
C.B
RED
BLK
GRY
WHT
CON301
TO A MAIN C.B
PIN301
P HEAD (DECK-1)
G HEAD-2
C.B
CON351
TO A MAIN C.B
PIN351
RP HEAD (DECK-2)

WIRING – 5 (POWER)



1
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A
B
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D
E
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G
H
I
J
E AC1 C.B
W2
R1
FC2
F101
FC1
T1
PT101
2
5
6
T2
U:AC120V
60HZ
PT101
F AC2 C.B
19
18
17
16
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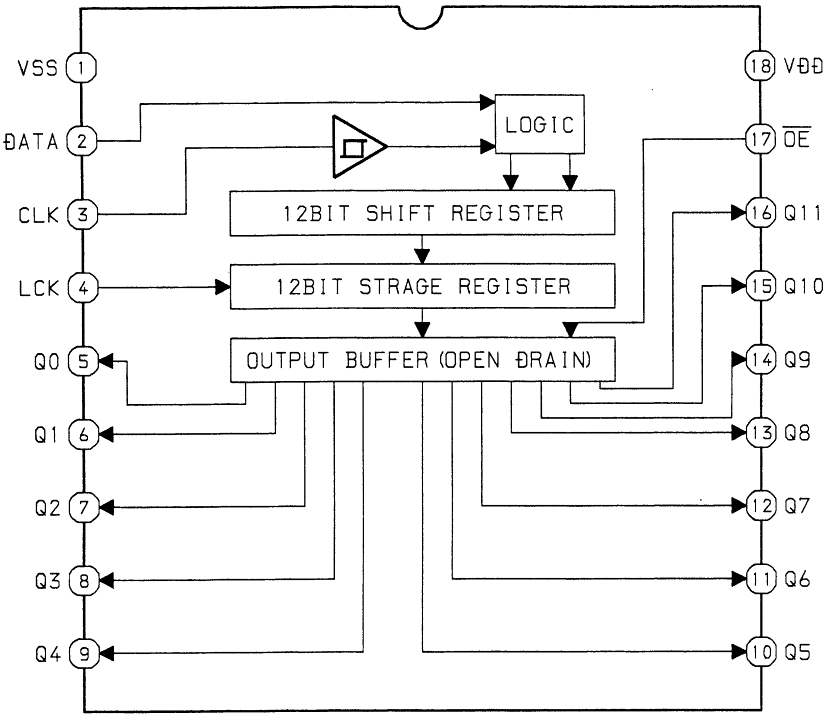
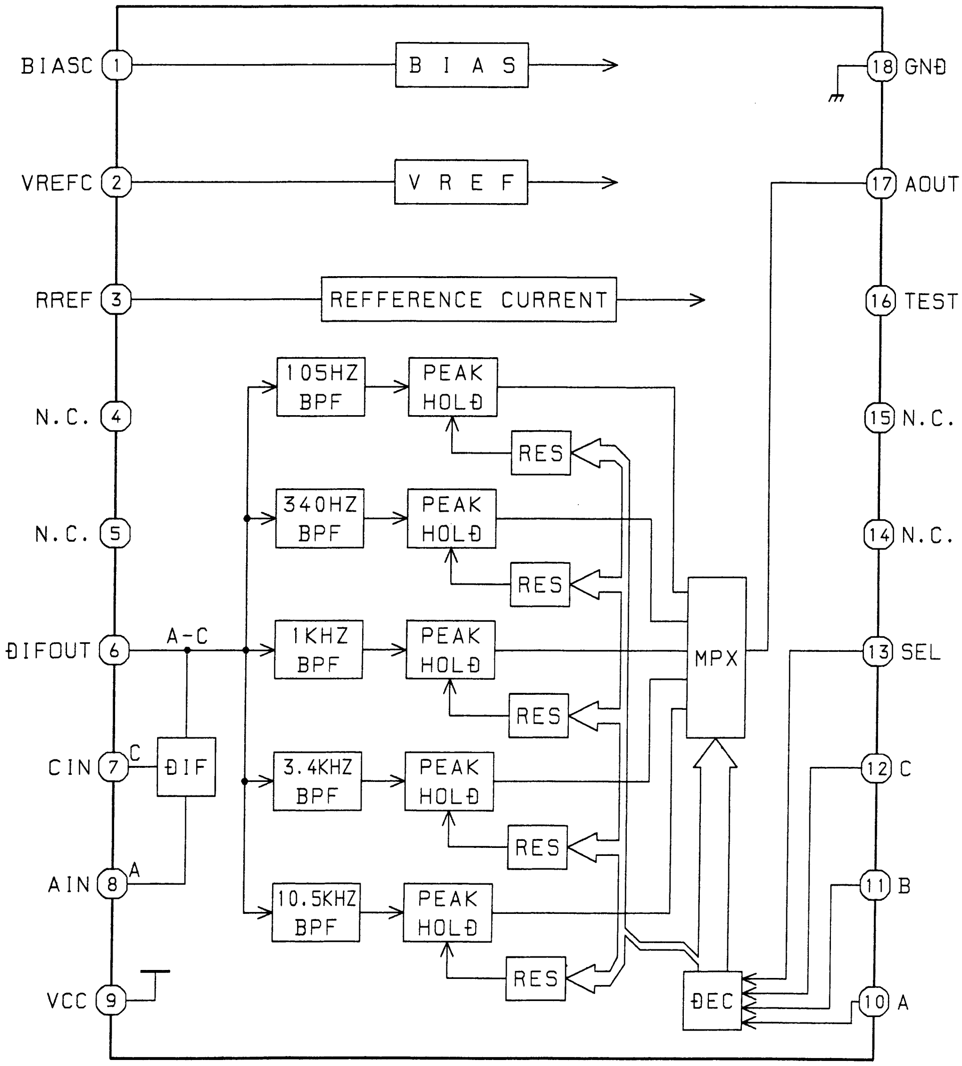
14
13
12
11
10
PR1
PR2
PR6
PR5
PR3
PR4
WH1
7
5
3
1
CON1
3
2
1
BLK
BLK
WHT
W1
TO A MAIN C.B
WH101
BLK
BLK
RED
3 2 1
TO 7ZA-1
PIN101

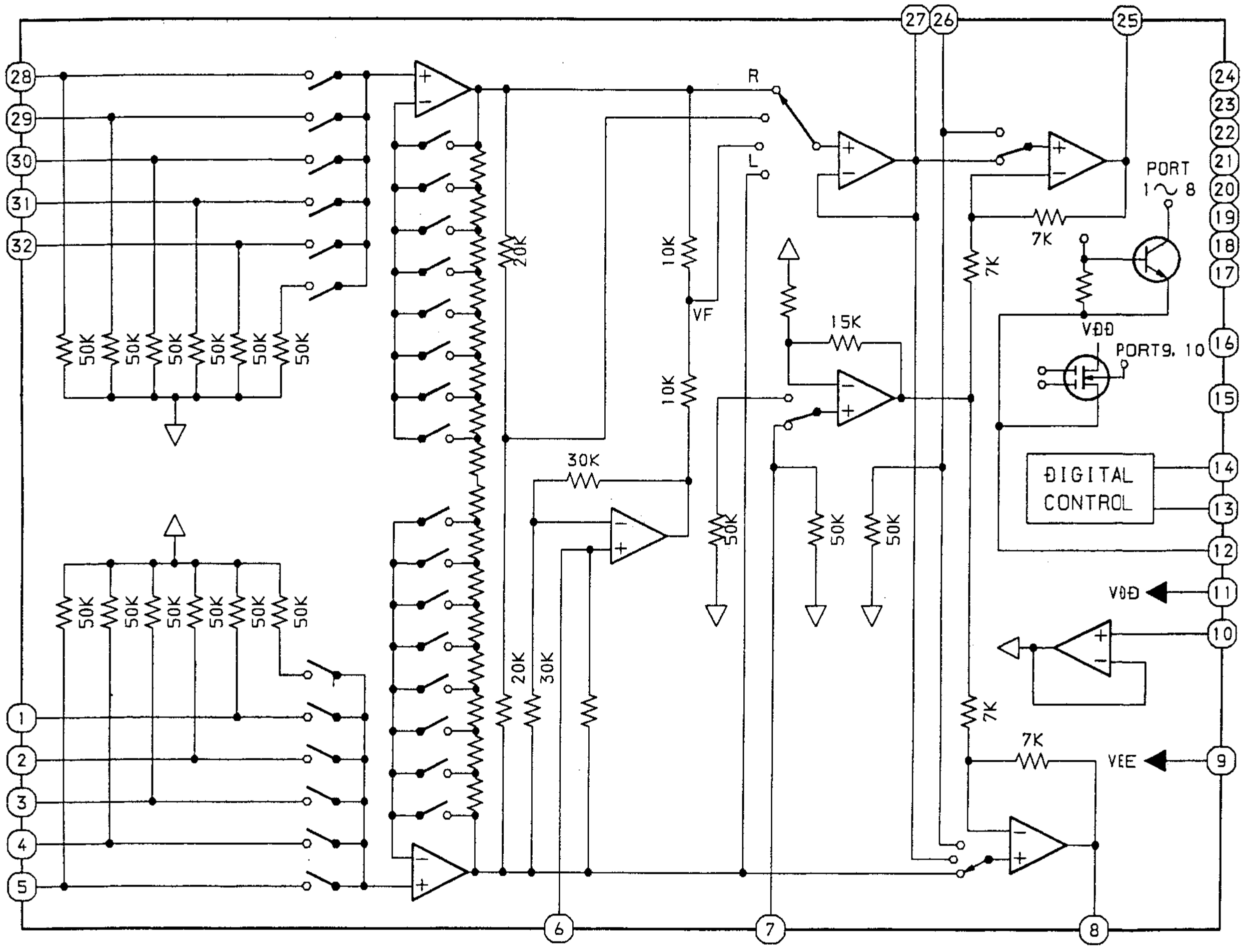
IC BLOCK DIAGRAM
IC, BU2092F


VSS 1
DATA 2
CLK 3
LCK 4
Q0 5
Q1 6
Q2 7
Q3 8
Q4 9
18 VDD
17 OE
16 Q11
15 Q10
14 Q9
13 Q8
12 Q7
11 Q6
10 Q5
LOGIC
12BIT SHIFT REGISTER
12BIT STRAGE REGISTER
OUTPUT BUFFER (OPEN DRAIN)

IC, BA3835S


BIASC 1
VREFC 2
RREF 3
N.C. 4
N.C. 5
DIFOUT 6
CIN 7
AIN 8
VCC 9
18 GND
17 AOUT
16 TEST
15 N.C.
14 N.C.
13 SEL
12 C
11 B
10 A
B I A S
V R E F
REFFERENCE CURRENT
105HZ BPF
340HZ BPF
1KHZ BPF
3.4KHZ BPF
10.5KHZ BPF
PEAK HOLD
RES
A-C
C
A
DIF
MPX
DEC

IC, BH3810FS



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12
11
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1
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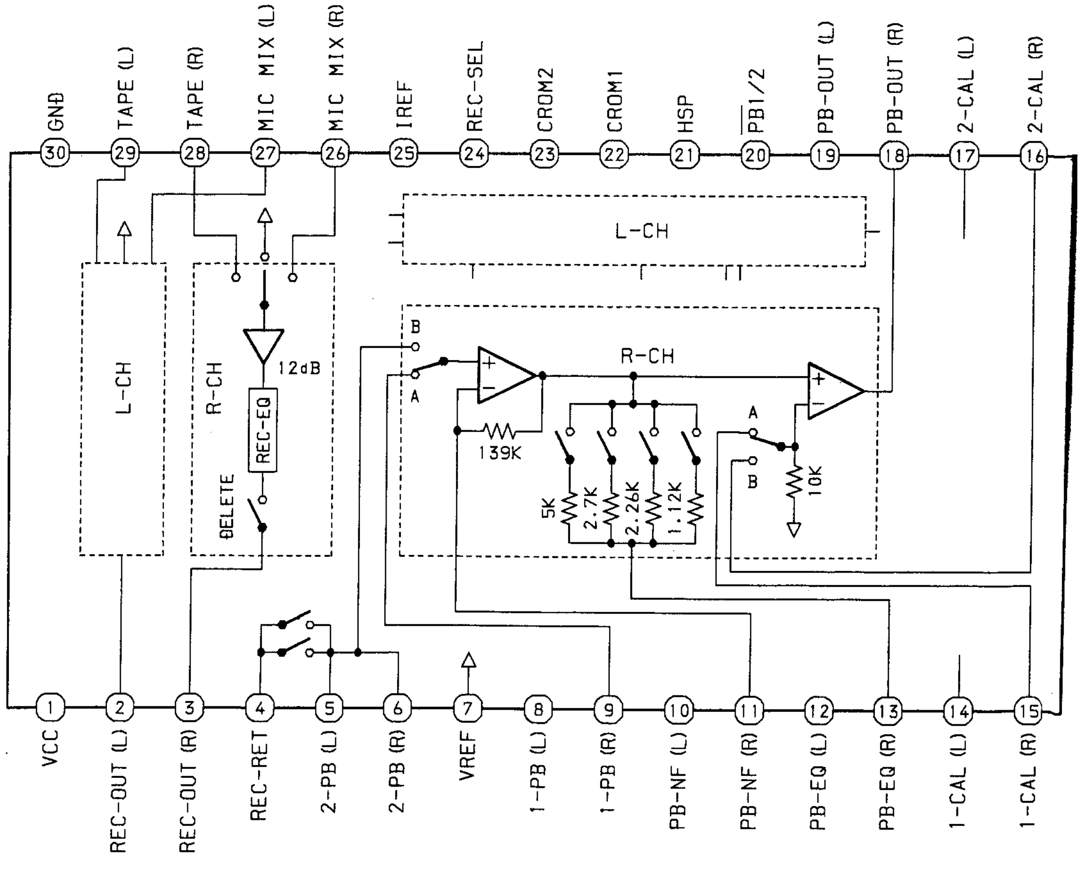
3
4
5
6
7
8
50K
20K
10K
VF
15K
30K
7K
R
L
PORT
1 ∼ 8
VDD
PORT9, 10
DIGITAL
CONTROL
VDD
VEE

IC, HA12211



GND
TAPE (L)
TAPE (R)
MIC MIX (L)
MIC MIX (R)
IREF
REC-SEL
CROM2
CROM1
HSP
PB1/2
PB-OUT (L)
PB-OUT (R)
2-CAL (L)
2-CAL (R)
30
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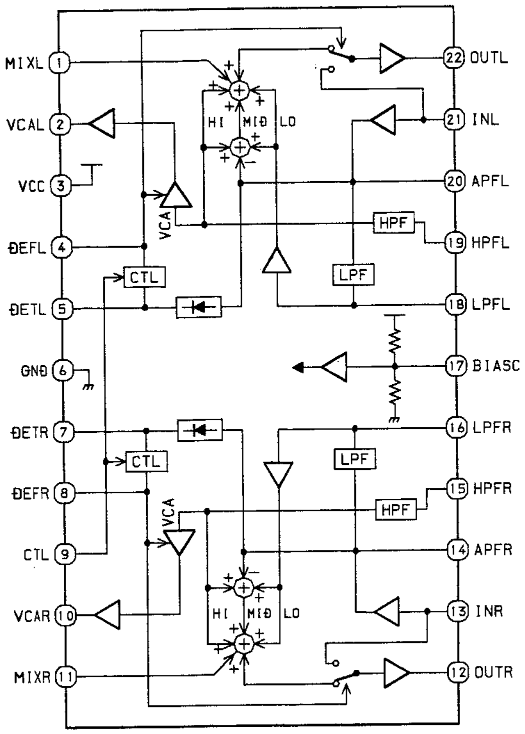
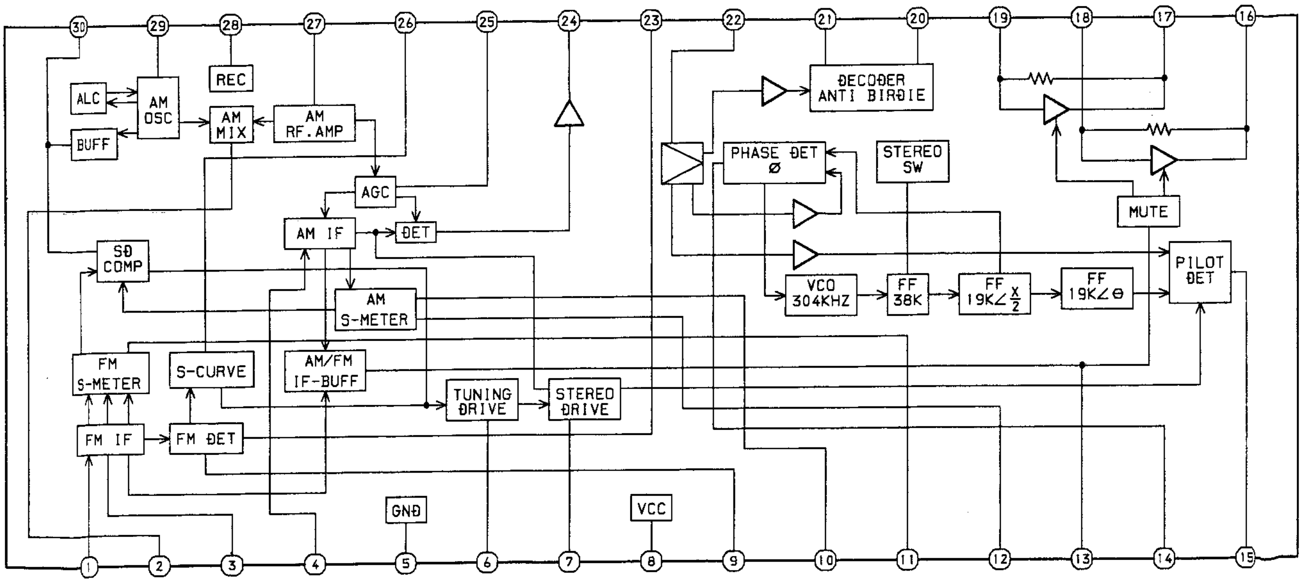
17
16
L-CH
R-CH
12dB
REC-EQ
DELETE
L-CH
B
A
R-CH
139K
5K
2.7K
2.26K
1.12K
A
B
10K
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
VCC
REC-OUT (L)
REC-OUT (R)
REC-RET
2-PB (L)
2-PB (R)
VREF
1-PB (L)
1-PB (R)
PB-NF (L)
PB-NF (R)
PB-EQ (L)
PB-EQ (R)
1-CAL (L)
1-CAL (R)

IC, BA3880S



MIXL 1
VCAL 2
VCC 3
DEFL 4
DETL 5
GND 6
DETR 7
DEFR 8
CTL 9
VCAR 10
MIXR 11
22 OUTL
21 INL
20 APFL
19 HPFL
18 LPFL
17 BIASC
16 LPFR
15 HPFR
14 APFR
13 INR
12 OUTR
HI
MID
LO
VCA
CTL
HPF
LPF
LPF
HPF
CTL
VCA
HI
MID
LO

IC, LA1837



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17
16
ALC
AM OSC
BUFF
REC
AM MIX
AM RF.AMP
AGC
AM IF
DET
SD COMP
AM S-METER
FM S-METER
S-CURVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
FM DET
GND
VCC
DECODER ANTI BIRDIE
PHASE DET Ø
STEREO SW
MUTE
PILOT DET
VCO 304KHZ
FF 38K
FF 19K∠X/2
FF 19K∠θ
1
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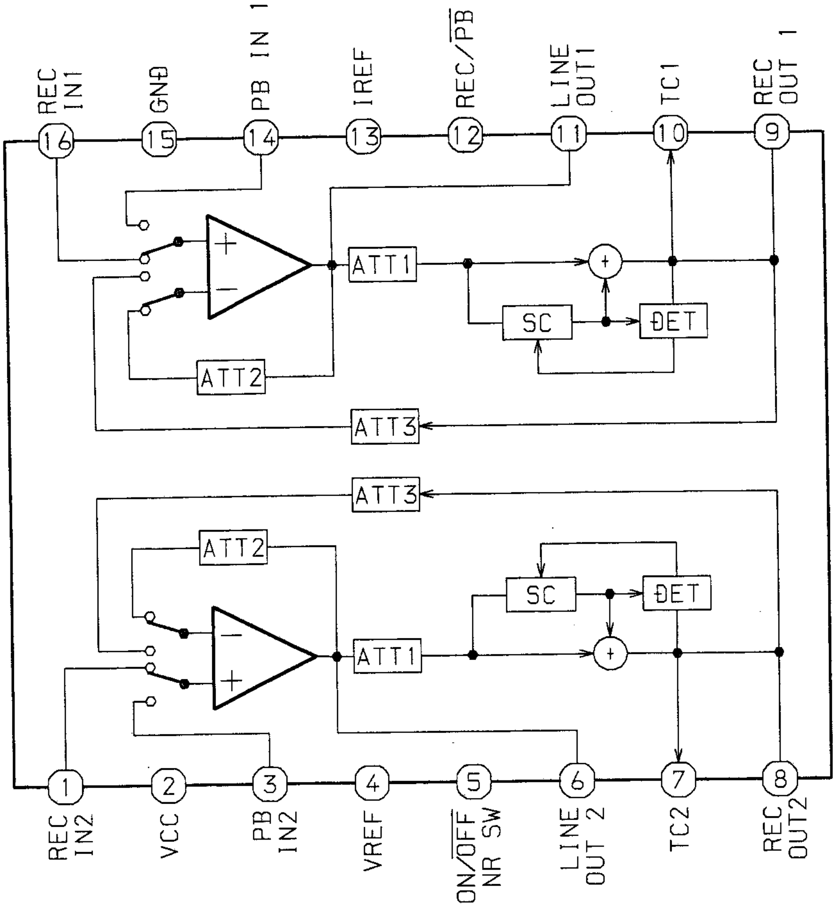
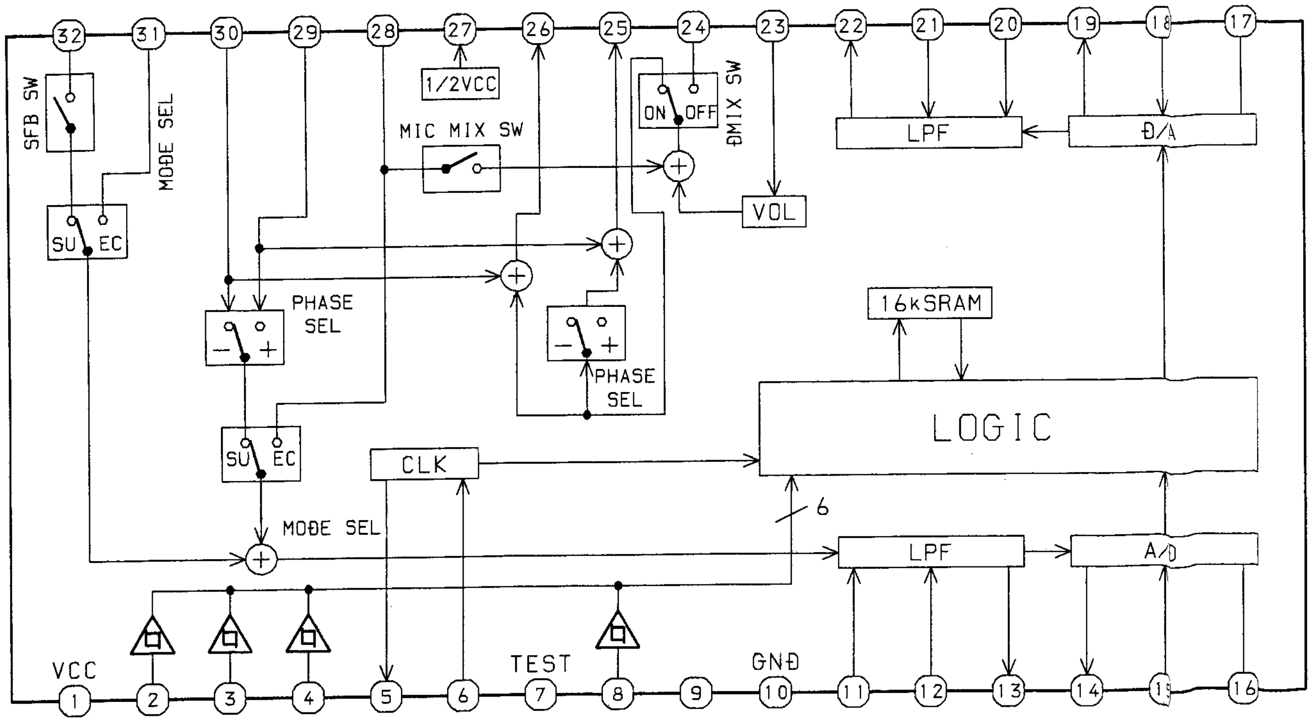
IC, CXA1553P


REC IN1
GND
PB IN 1
IREF
REC/$\overline{PB}$
LINE OUT1
TC1
REC OUT 1
16
15
14
13
12
11
10
9
ATT1
SC
DET
ATT2
ATT3
ATT3
ATT2
SC
DET
ATT1
1
2
3
4
5
6
7
8
REC IN2
VCC
PB IN2
VREF
ON/$\overline{OFF}$ NR SW
LINE OUT 2
TC2
REC OUT2

ATT:Attenuator
SC:Side Chain
DET:Detector

IC, M65849BFP


32
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22
21
20
19
18
17
SFB SW
MODE SEL
1/2VCC
MIC MIX SW
ON
OFF
DMIX SW
VOL
LPF
D/A
SU
EC
PHASE SEL
PHASE SEL
16kSRAM
LOGIC
SU
EC
CLK
MODE SEL
6
LPF
A/D
VCC
TEST
GND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

IC DESCRIPTION

IC, LC866548V

Pin No.	Pin Name	I/O	Description
1	RT-A	I	Rotary encoder A input.
2	RT-B	I	Rotary encoder B input.
3	LED-MD	O	"MD" LED ON/OFF output.
4	LED-CD	O	"CD " LED ON/OFF output.
5	LED-AUX	O	"AUX" LED ON/OFF output.
6	LED-TUNER	O	"TUNER" LED ON/OFF output.
7	LED-TAPE	O	"TAPE" LED ON/OFF output.
8	HSP	O	Tape deck motor high speed ON/OFF output.
9	O-POWER	O	System power supply ON/OFF output.
10	O-MUTE	O	System mute ON/OFF output.
11	O-CLK-SHIFT	O	U-COM clock shift output.
12	RESET	I	Reset input.
13	I-HP-MUTE	–	Not connected.
14	I-DISH	I	CD turntable photo sensor A/D converter input.
15	VSS 1	–	GND.
16	CF 1	–	5.76MHz oscillator circuit.
17	CF 2		
18	VDD 1	–	Power supply input.
19	HOLD	I	Power failure detected input "1" to stop clock and main memory.
20	KEY-1	I	KEY input. (A/D)
21	KEY-2		
22	KEY-3		
23	I-CD SW	I	CD mechanical switch A/D converter input.
24	I-MIC	I	Microphone input for AUTO VF display.
25	I-TU-SIG/MS	I	Tuner signal and deck music sensor signal input.
26	I-SPEANA	I	A/D input for spectrum analyzer display.
27	I-WRQ/RDS-CLK	I	CD WRQ input . TUNER RDS CLOCK input.
28	I-TM-BASE	I	REFERENCE CLOCK input for timer watch.
29	I-RMC	I	System remote control signal input.
30 ~ 37	G9 ~ G2	O	FL GRID output G2~G9.
38 ~ 43	P32 ~ P27	O	FL SEGMENT output P27~P32.
44	G1	O	FL grid output G1.
45	P26	–	FL SEGMENT output P26.
46	VDD3	–	Power supply input.
47	SPEANA-A/P25	O	Spectrum analyzer band switching output /FL segment P25 output.
48	SPEANA-B/P24	O	Spectrum analyzer band switching output /FL segment P24 output.
49	SPEANA-C/P23	O	Spectrum analyzer band switching output /FL segment P23 output.
50	P22/H-DUBB INH	I /O	FL segment P22 output / high dubbing inhibit input to diode.
51	VP	–	Power supply input for FL display.
52	P21/AM-ST	I /O	FL segment P21 output / AM stereo input to diode.
53	P20/LW	I/O	FL segment P20 output / LW mode data input to diode.

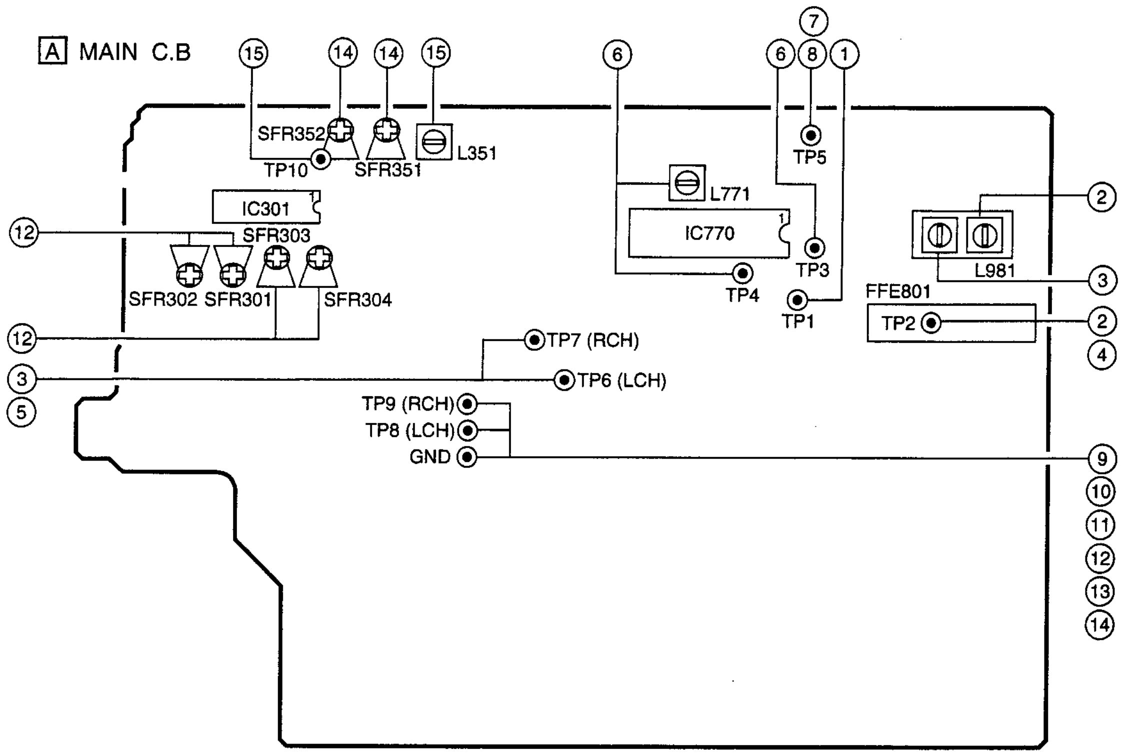
Pin No.	Pin Name	I/O	Description
54	P19/SW	I/O	FL segment P19 output / SW mode data input to diode.
55	P18/FM 1	I/O	FL segment P18 output / FM1 (OIRT) data input to diode.
56	P17/RDS	I/O	FL segment P17 output / RDS data input to diode.
57	P16/BBE	I/O	FL segment P16 output / BBE data input to diode.
58	P15/DSP	I/O	FL segment P15 output / DSP data input to diode.
59	P14/DOLBY-SURR	I/O	FL segment P14 output / DOLBY-SURR data input to diode.
60	P13/K-CON	I/O	FL segment P13 output / K-CON data input to diode.
61	P12/DOLBY	I/O	FL segment P12 output / DOLBY data input to diode.
62	P11/WAY	I/O	FL segment P11 output / DECK/WAY MECHA data input to diode.
63	P10/AM-9K/10K	I/O	FL segment P10 output / INITIAL AM 10 kHz step data input to diode.
64	P9/$\overline{\text{CST 2}}$	I/O	FL segment P9 output / DECK2 cassette detect switch data input.
65	P8/$\overline{\text{REB}}$	I/O	FL segment P8 output / DECK2 side-B record OK switch data input.
66	P7/$\overline{\text{CAM 2}}$	I/O	FL segment P7 output / DECK2 CAM switch data input.
67	P6/$\overline{\text{AUTO 1}}$	I/O	FL segment P6 output / DECK1 AUTO stop signal input.
68	P5/$\overline{\text{AUTO 2}}$	I/O	FL segment P5 output / DECK2 AUTO stop signal input.
69	P4/$\overline{\text{CAM 1}}$	I/O	FL segment P4 output / DECK1 CAM switch data input.
70	P3/$\overline{\text{CST 1}}$	I/O	FL segment P3 output / DECK1 cassette detect switch data input.
71	P2/$\overline{\text{REA}}$	I/O	FL segment P2 output / DECK2 side A record OK switch data input.
72	VDD 4	–	Power supply input.
73	P1/2092	I/O	FL segment P1 output / SHIFT resistor IC 2092 data input to diode.
74	K-SCAN	O	Switch SCAN timing output.
75	L CK	O	Latch clock output for front shift resistor.
76	PRO-CE	O	PRO LOGIC IC chip enable output.
77	PLL-CE	O	PLL IC chip enable output.
78	MA-STB	O	Latch strobe output for MAIN PWB.
79	DATA	O	DATA output for MAIN, FORNT, PROLOGIC PWB.
80	CLK	O	CLOCK output for MAIN,FORNT, PROLOGIC PWB.
81	DISH-RVS	O	CD turntable reverse rotation output.
82	DISH-FWD	O	CD turntable forward rotation output.
83	TRAY-OPEN	O	CD TRAY OPEN data output.
84	TRAY-CLOSE	O	CD TRAY CLOSE data output.
85	$\overline{\text{LED}}$ ▶▶	O	▶▶ LED $\overline{\text{ON}}$/OFF output.
86	$\overline{\text{LED}}$ ◀◀	O	◀◀ LED $\overline{\text{ON}}$/OFF output.
87	$\overline{\text{LED}}$ ▶	O	▶ LED $\overline{\text{ON}}$/OFF output.
88	$\overline{\text{LED}}$ ◀	O	◀ LED $\overline{\text{ON}}$/OFF output.
89	VSS 2	–	GND.
90	VDD 2	–	Power supply input.
91	$\overline{\text{LED}}$ ■	O	■ LED $\overline{\text{ON}}$/OFF output.
92	$\overline{\text{LED}}$ ❚❚	O	❚❚ LED $\overline{\text{ON}}$/OFF output.
93	SOL 1	O	DECK 1 Solenoid output.
94	SOL 2	O	DECK 2 Solenoid output.

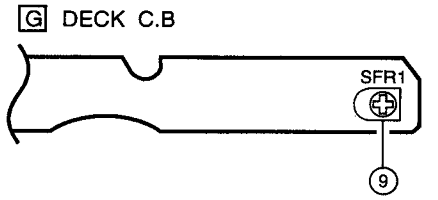
Pin No.	Pin Name	I/O	Description
95	O-MOTOR	O	DECK MOTOR ON/$\overline{\text{OFF}}$ output.
96	I-$\overline{\text{TUNE}}$/IFC/SUBQ	I	Tune IF count serial data input /CD SUB Q data input.
97	I-STEREO/O-SQCLK	I/O	Tuner stereo detected input/CD SQ CLOCK output.
98	I-RDS-DATA/O-DATA	I/O	RDS data input/CD data output.
99	O-CD CE	O	CD CE output.
100	O-CD CLK	O	CD CLOCK output.

IC, LC72131D

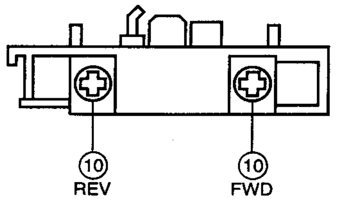
<table>
<tr><th>Pin No.</th><th>Pin Name</th><th>I/O</th><th>Description</th></tr>
<tr><td>1</td><td>X IN</td><td rowspan="2">I/O</td><td rowspan="2">A crystal oscillator (7.2MHz) is connected between these pins.</td></tr>
<tr><td>22</td><td>X OUT</td></tr>
<tr><td>2</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>3</td><td>CE</td><td>I</td><td>To enable the IC. Active "H".</td></tr>
<tr><td>4</td><td>DI</td><td>I</td><td>Digital data input from CPU(LC866548V) when relevant key is operated. Active "H".</td></tr>
<tr><td>5</td><td>CL</td><td>I</td><td>To clock in the data DI.</td></tr>
<tr><td>6</td><td>DO</td><td>O</td><td>Digital data output to CPU (LC866548V).</td></tr>
<tr><td>7</td><td>T-BASE</td><td>O</td><td>Outputs a reference clock signal (8Hz) for the clock.</td></tr>
<tr><td>8</td><td>MONO / BEAT</td><td>O</td><td>Outputs "H" when MONO / BEAT is switched.</td></tr>
<tr><td>9</td><td>$\overline{\text{FM}}$ / SW</td><td>O</td><td>Output "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>H</td><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr>
</table></td></tr>
<tr><td>10</td><td>$\overline{\text{MW}}$ / SW</td><td>O</td><td>Outputs "L" or "H" as follows:
<table>
<tr><th colspan="2">2 BAND</th><th colspan="3">3 BAND</th><th colspan="3">3 BAND</th></tr>
<tr><td>AM</td><td>FM</td><td>LW</td><td>MW</td><td>FM</td><td>MW</td><td>SW</td><td>FM</td></tr>
<tr><td>L</td><td>L</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>11</td><td>IF-MUTE</td><td>O</td><td>To control internal counter.</td></tr>
<tr><td>12</td><td>IF-IN</td><td>I</td><td>General purpose counter input.</td></tr>
<tr><td>13</td><td>$\overline{\text{TUNE}}$</td><td>I</td><td>Receives "L" when station is tuned.</td></tr>
<tr><td>14</td><td>NC</td><td>–</td><td>Not used.</td></tr>
<tr><td>15</td><td>AM-IN</td><td>I</td><td>Receives the AM local oscillator frequency signal.</td></tr>
<tr><td>16</td><td>FM-IN</td><td>I</td><td>Receives the FM local oscillator frequency signal.</td></tr>
<tr><td>17</td><td>VDD</td><td>–</td><td>Supply power to IC (+5V).</td></tr>
<tr><td>18</td><td>PD</td><td>O</td><td>PLL charge pump output.</td></tr>
<tr><td>19</td><td>A-IN</td><td>I</td><td rowspan="2">The MOS transistor for PLL active low pass filter.</td></tr>
<tr><td>20</td><td>A-OUT</td><td>O</td></tr>
<tr><td>21</td><td>VSS</td><td>–</td><td>Ground.</td></tr>
</table>

ADJUSTMENT <TUNER / DECK>





DECK-1 P HEAD, DECK-2 R/P/E HEAD



-< TUNER SECTION >

1. Clock Frequency Check
   Settings : • Test point : TP1
   Method : Set to MW 1710kHz and check that the test point is 2160kHz ± 45Hz.

2. MW VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to MW 1710kHz and check that the test point is 6.0 ± 1.0V.

3. MW Tracking Adjustment
   Settings : • Test point : TP6, TP7
   • Adjustment location :
   L981 .... 1000kHz

4. FM VT Check
   Settings : • Test point : TP2 (VT)
   Method : Set to FM 108.0MHz and check that the test point is less than 8.5V. Set to FM 87.5MHz and check that the test point is more than 1.5V.

5. FM Tracking Check
   Settings : • Test point : TP6, TP7
   Method : • Set to FM 98.0MHz and check that the test point is 2 ± 6dB.

6. DC Balance / Mono Distortion Adjustment
   Settings : • Test point : TP3, TP4
   • Adjustment location : L771
   • Input level : 54dB
   Method : Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V ± 0.04V. Next, check that the distortion is less than 1.3%

7. Auto Stop Level Check
   Settings : • Test point : TP5
   • Input level : adjustable
   Method : Set to FM 98.0 MHz and check that the voltage low about 0.1V. After that voltage high about 7.0V out by 2dB down.

8. Auto Stop Level Check
   FM
   Settings : • Test point : TP5
   • Input level : adjustable
   Method : Set to FM 98.0MHz and check that the test point is 25dB ± 10dB.

   MW
   Settings : • Test point : TP5
   • Input level : adjustable
   Method : Set to MW 1000kHz and check that the test point is 35 ~ 60dB.

< DECK SECTION >

9. Tape Speed Adjustment
   Settings : • Test tape : TTA–100
   • Test point : TP8, TP9
   • Adjustment location : SFR1
   Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz.

10. Head Azimuth Adjustment
    Settings : • Test tape : TTA–300
    • Test point : TP8, TP9
    • Adjustment location : Head azimuth adjustment screw
    Method : Play back the 10kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on each FWD PLAY and REV PLAY mode.

11. PB Frequency Response Check (DECK 1, DECK 2)
    Settings : • Test tape : TTA–300
    • Test point : TP8, TP9
    Method : Play back the 315Hz and 10kHz signals of the test tape and check that the output ratio of the 10kHz signal with respect to that of the 315Hz signal is within 2dB.

12. PB Sensitivity Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–200
    • Test point : TP8, TP9
    • Adjustment location : SFR301 (DECK 1, Lch)
    SFR302 (DECK 1, Rch)
    SFR303 (DECK 2, Lch)
    SFR304 (DECK 2, Rch)
    Method : Play back the test tape and adjust SFRs so that the output level of the test point becomes 245mV.

13. REC/PB Frequency Response Adjustment
    Settings : • Test tape : TTA–602
    • Test point : TP8, TP9
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 170mV. Record and play back the 1kHz and 10kHz signals and adjust SFRs so that the output of the 10kHz signals becomes 0dB ± 0.5dB with respect to that of the 1kHz signal.

14. REC/PB Sensitivity Adjustment
    Settings : • Test tape : TTA–602
    • Test point : TP8, TP9
    • Input signal : 1kHz / 10kHz (LINE IN)
    • Adjustment location : SFR351 (Lch)
    SFR352 (Rch)
    Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes 17mV. Record and play back the 1kHz signals and adjust SFRs so that the output is 17mV ± 0.5dB.

15. Bias OSC Frequency Adjustment
    Settings : • Test tape : TTA–601
    • Test point : TP10
    • Adjustment location : L351
    Method : Set to the REC mode. Adjust L351 so that the frequency counter of the test point is 85kHz ± 1kHz.

PRACTICAL SERVICE FIGURE

<TUNER SECTION>

<FM SECTION>

IHF Sensitivity :	6dB ± 4dB [at 87.5MHz]
(THD 3%)	5dB ± 4dB [at 98.0 / 108.0MHz]
S/N 50dB Quieting sensitivity :	30dB ± 6dB [at 87.5 / 98.0 / 108.0MHz]
Signal to noise ratio :	More than 65dB [at 98.0MHz]<MONO> More than 64dB [at 98.0MHz]<STEREO>
Distortion :	1.3% [at 98.0MHz]<MONO> Less than 2.0% [at 98.0MHz]<STEREO>
Stereo separation :	More than 25dB [at 98.0MHz]
Intermediate frequency :	10.7MHz

<MW SECTION>

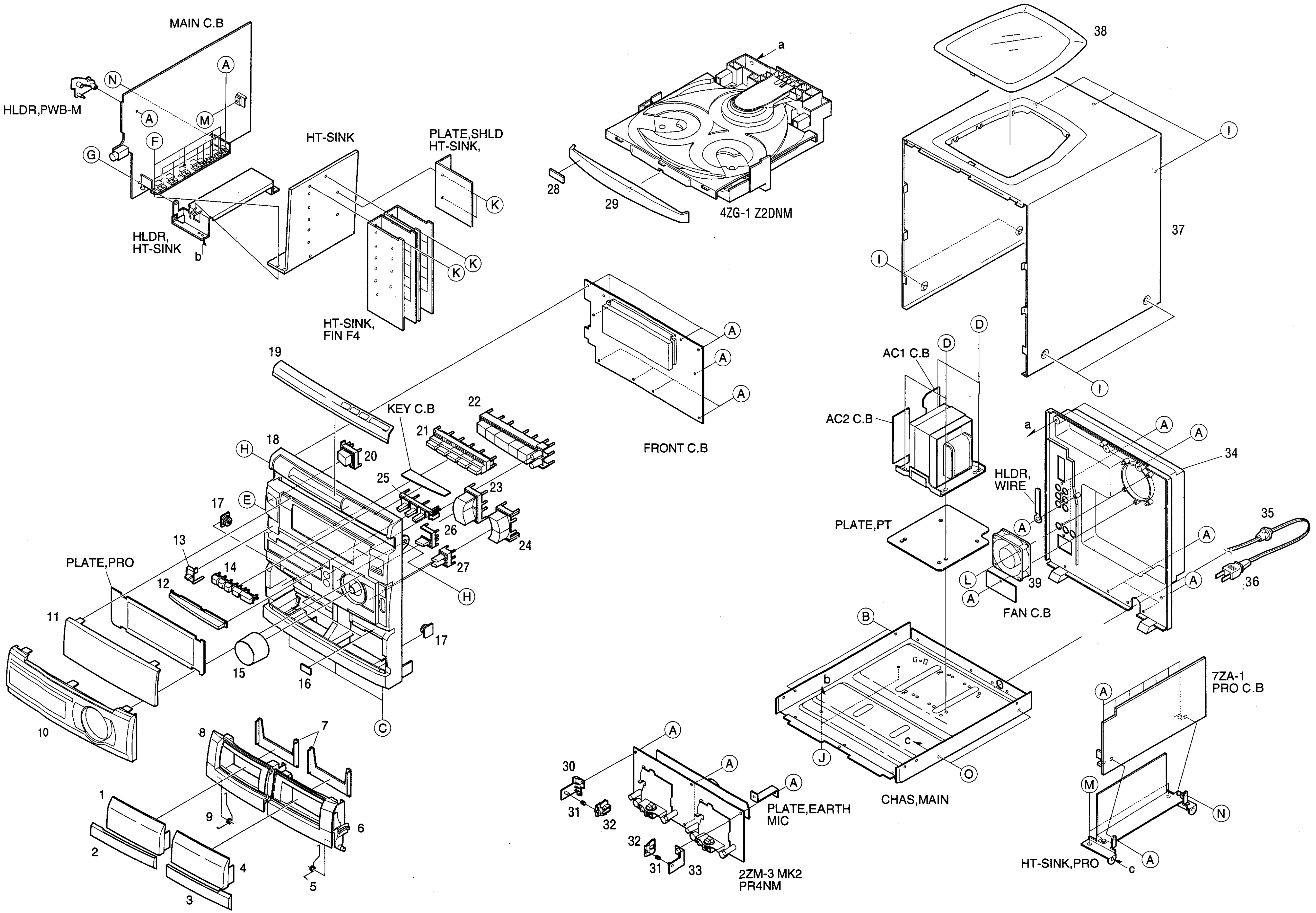
Sensitivity :	55dB ± 5dB [at 600kHz]
(S/N 20 dB)	53dB ± 5dB [at 1000 / 1400kHz]
Distortion :	Less than 1.5% [at 1000kHz]
Intermediate frequency :	450kHz

<DECK SECTION>

<2ZM-3MK2>

Tape speed :	3000Hz ± 45Hz
Wow & flutter :	Less than 0.15% (R.M.S)
Take-up torque :	30 ~ 55g-cm (FWD, REV)
F.F & REW torque :	75 ~ 180g-cm
Back tension :	2 ~ 7g-cm (FWD, REV)
PB Output level :	300mV ± 1dB (SP OUT 2V)
REC/PB Output level :	180mV ± 2dB (SP OUT 2V)
Distortion (REC/PB) :	Less than 2.0% (NORM, CrO2)
Noise level (PB) :	Less than 1.8mV (DOLBY NR ON / OFF NORM. Vol MAX.)
Noise level (REC/PB) :	Less than 2.2mV (DOLBY NR ON / OFF NORM.)
Crosstalk :	More than 60dB (1kHz, 0VU)
Channel separation :	More than 30dB (1kHz, 0VU)
Erasing ratio :	More than 60dB (at 125Hz)
Test tape :	NORMAL : TTA–602 CrO2 : TTA–615

MECHANICAL EXPLODED VIEW 1 / 1


MAIN C.B
HLDR,PWB-M
N
A
M
F
G
HT-SINK
PLATE,SHLD
HT-SINK,
K
HLDR,
HT-SINK
b
HT-SINK,
FIN F4
a
28
29
4ZG-1 Z2DNM
38
I
37
D
AC1 C.B
AC2 C.B
HLDR,
WIRE
PLATE,PT
34
35
36
39
L
FAN C.B
FRONT C.B
19
KEY C.B
22
21
18
H
20
25
23
26
24
27
17
E
13
14
12
PLATE,PRO
11
15
16
10
C
8
7
1
9
6
2
4
5
3
30
31
32
33
PLATE,EARTH
MIC
2ZM-3 MK2
PR4NM
B
J
O
c
CHAS,MAIN
7ZA-1
PRO C.B
HT-SINK,PRO

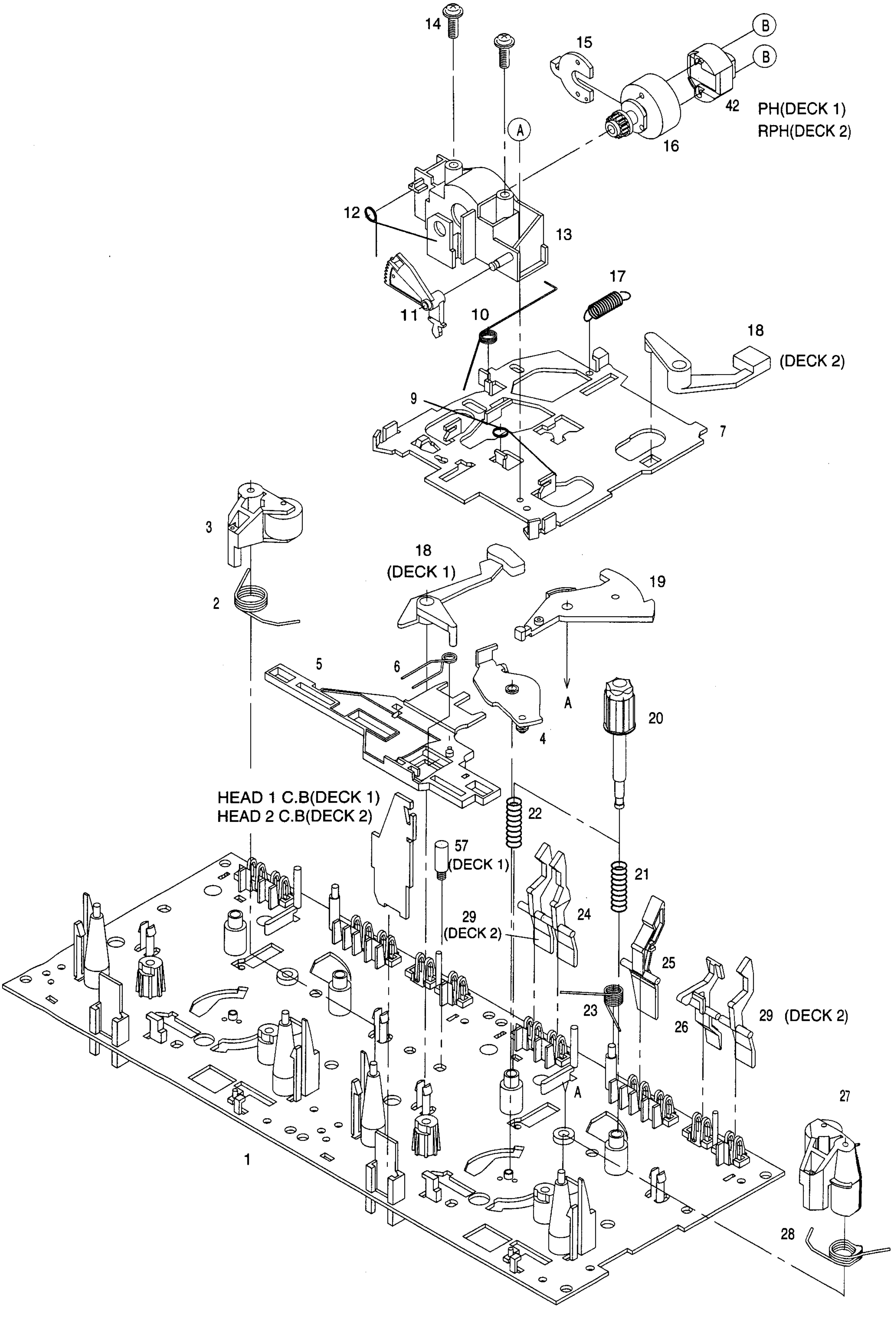
MECHANICAL PARTS LIST 1 / 1

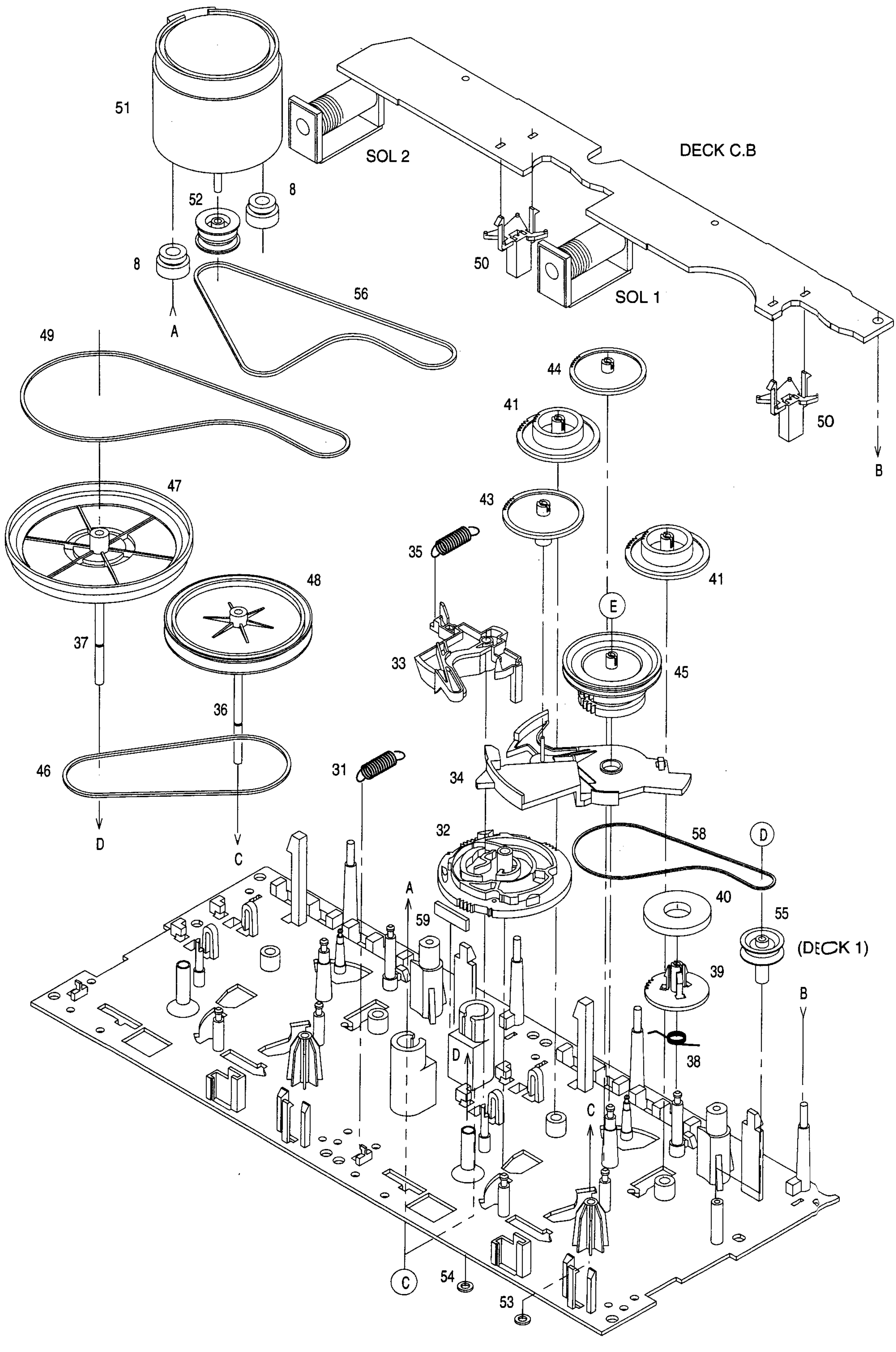
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NF4-034-010		WINDOW,CASS 1
2	87-NF4-032-010		PANEL,CASS 1H
3	87-NF4-033-010		PANEL,CASS 2H
4	87-NF4-035-010		WINDOW,CASS 2
5	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
6	87-NF4-005-110		BOX,CASS 2
7	86-NF6-061-010		REFLECTOR,CASS
8	87-NF4-004-110		BOX,CASS 1
9	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
10	87-NF4-031-110		PANEL,FR H
11	87-NFR-004-010		WINDOW,DISPLAY U
12	87-NF4-042-010		PANEL,OPE
13	87-NF4-036-010		KEY,DEMO
14	87-NF4-007-110		KEY,CD
15	87-NF4-028-010		KNOB,RTRY VOL
16	81-532-080-010		LABEL, CASS. COMPT
17	87-063-165-010		OIL-DMPR 150
18	87-NFR-006-110		CABI,FR U
19	87-NF4-037-110		WINDOW,CD
20	87-NF4-008-010		KEY,POWER
21	87-NF4-020-010		KEY,ASSY FUN
22	87-NF4-027-010		KEY,ASSY OPE
23	87-NFR-001-210		KEY,PRO
24	87-NF4-010-010		KEY,BBE
25	87-NF4-012-010		KEY,DOLBY
26	87-NF4-046-010		KEY,VF U
27	87-NF4-011-010		KEY,VOL
28	82-NE6-067-010		BADGE,AIWA 30N
29	87-NF4-029-010		PANEL,TRAY H
30	87-NF4-216-010		HLDR,LOCK 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
31	82-NF5-228-010		SPR-C,LOCK
32	82-NF5-229-010		PLATE,LOCK
33	87-NF4-217-010		HLDR,LOCK 2
34	87-NFR-017-210		CABI,REAR UST
35	87-085-189-010		BUSHING,CORD (U)
⚠ 36	87-050-053-010		AC CORD ASSY,U-2
37	86-NFT-005-110		CABI,STEEL TS
38	86-NF6-101-010		WINDOW,TOP UL
39	87-A90-463-010		FAN,2408NL
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-591-094-410		TAPPING SCREW, QIT+3-6
C	87-067-688-010		BVTT+3-6
D	87-078-191-010		S-SCREW,IT+4-10
E	87-723-096-410		QT2+3-10W/O SLOT BL
F	87-067-758-010		BVT2+3-12 W/O SLOT
G	87-067-633-010		TAPPING SCREW, BVT2+3-8
H	87-721-097-410		QT2+3-12 GLD
I	87-067-641-010		UTT2+3-8(W/O SLOT)BL
J	87-067-584-010		TAPPING SCREW, BVT2+3-6
K	87-B10-090-010		BVIT3B+3-12 GOLD
L	87-751-104-410		VT2+3-30
M	87-067-579-010		TAPPING SCREW, BVT2+3-8
N	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
O	87-721-096-410		QT2+3-10 GLD

TAPE MECHANISM EXPLODED VIEW 1 / 1


14
15
B
B
42
PH(DECK 1)
RPH(DECK 2)
A
16
12
13
17
11
10
18
(DECK 2)
9
7
3
18
(DECK 1)
19
2
5
6
A
20
4
HEAD 1 C.B(DECK 1)
HEAD 2 C.B(DECK 2)
22
57
(DECK 1)
21
24
29
(DECK 2)
25
23
26
29 (DECK 2)
A
27
1
28

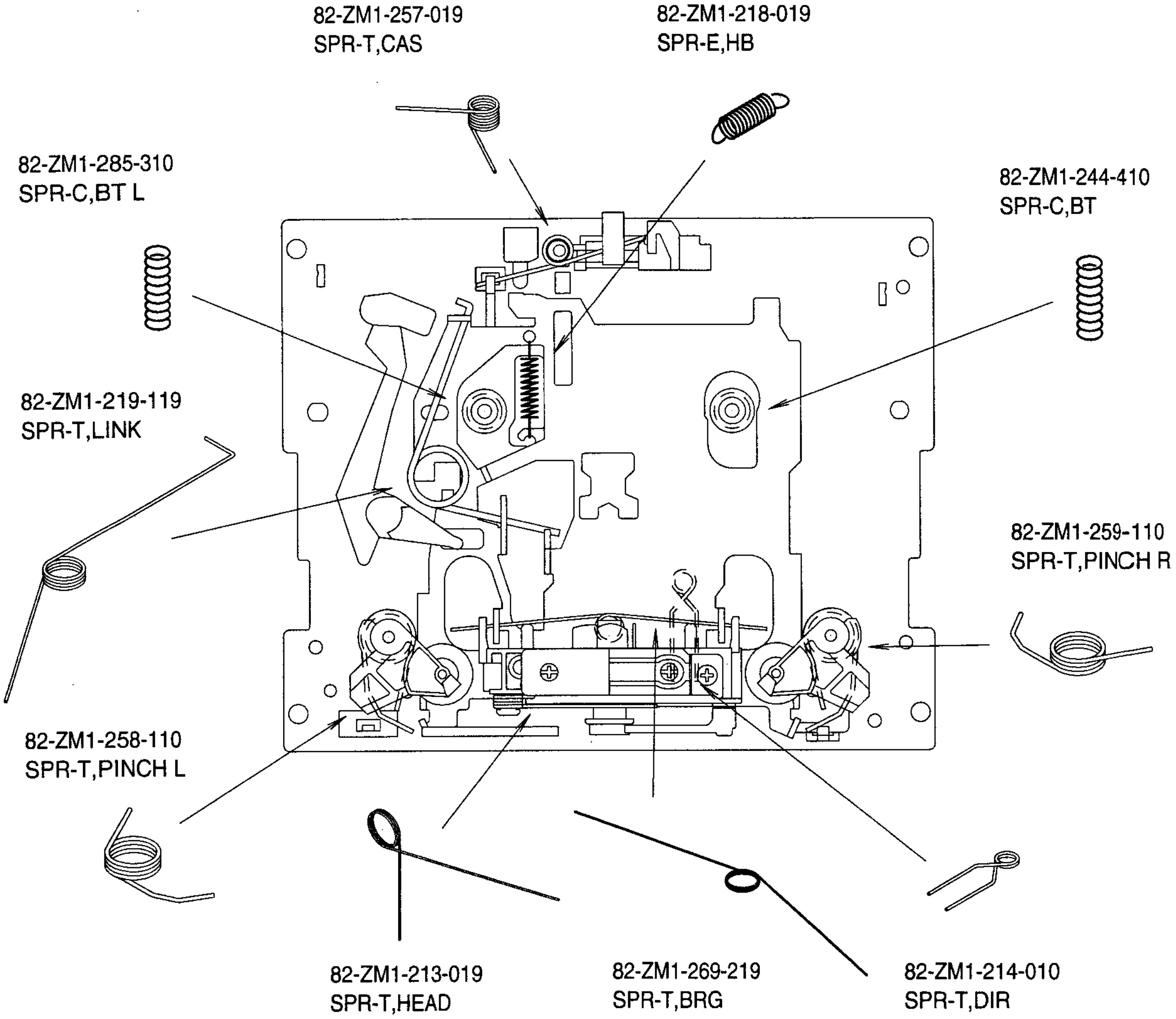

SOL 2
DECK C.B
A
SOL 1
B
E
D
C
D
A
(DECK 1)
B
D
C
C

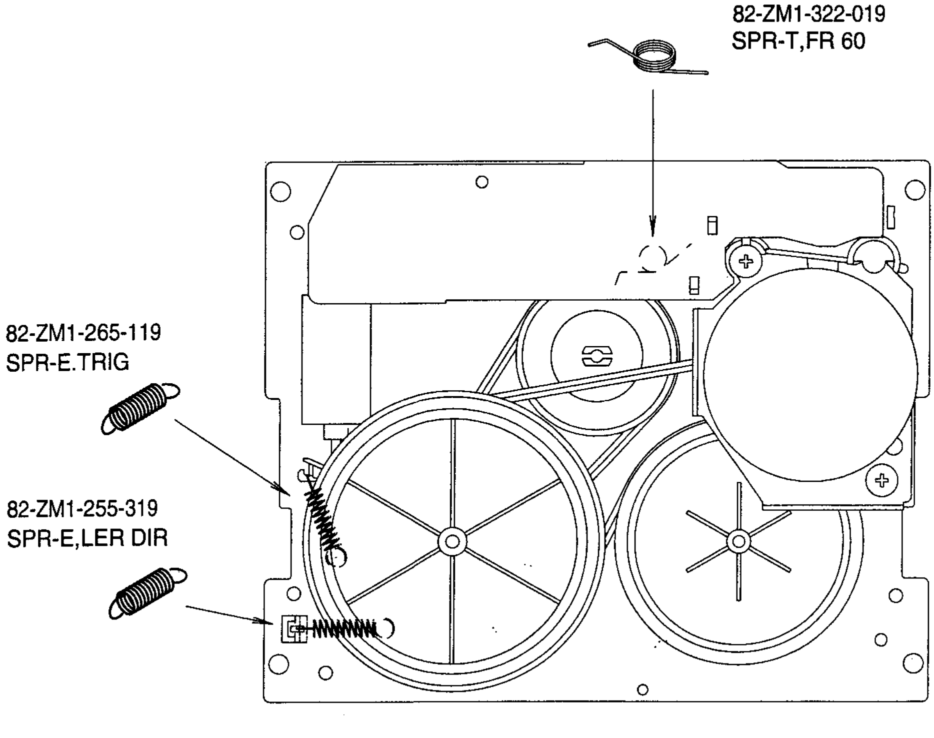
TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-319-010		HEAD,PH HADKH2 FPC
42	87-A90-320-010		HEAD,RPH HADKH5 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

SPRING APPLICATION POSITION


82-ZM1-257-019
SPR-T,CAS
82-ZM1-218-019
SPR-E,HB
82-ZM1-285-310
SPR-C,BT L
82-ZM1-244-410
SPR-C,BT
82-ZM1-219-119
SPR-T,LINK
82-ZM1-259-110
SPR-T,PINCH R
82-ZM1-258-110
SPR-T,PINCH L
82-ZM1-213-019
SPR-T,HEAD
82-ZM1-269-219
SPR-T,BRG
82-ZM1-214-010
SPR-T,DIR

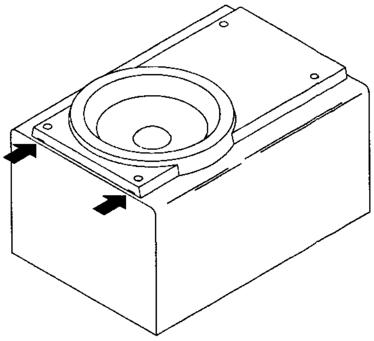

82-ZM1-322-019
SPR-T,FR 60
82-ZM1-265-119
SPR-E.TRIG
82-ZM1-255-319
SPR-E,LER DIR

SPEAKER DISASSEMBLY INSTRUCTIONS

Type.1

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

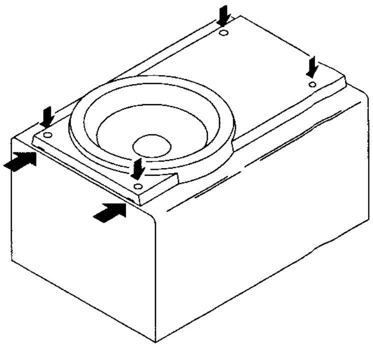
Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. remove the screws of each speaker unit and then remove the speaker units.



Type.2

グリルフレームを外し、4個のゴムキャップをマイナスドライバーで端の方から持ち上げて外すと中にビスが有りますので、ビスを取り外します。矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットのビスを取り、スピーカーユニットを外してください。

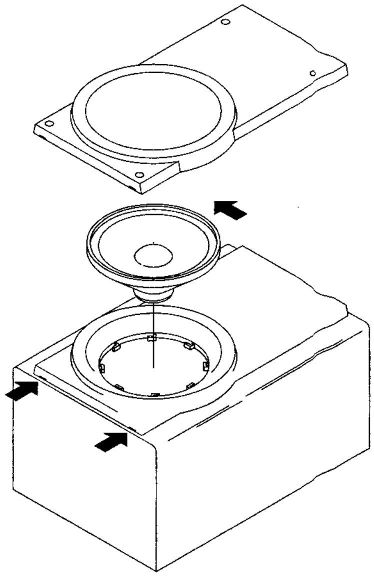
Remove the grill frame and four pieces fo rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



Type.3

矢印の位置にマイナスドライバーを差し込んで、パネルを外します。各々のスピーカーユニットの凹にマイナスドライバーを差し込んで、反時計方向に回転させスピーカーユニットを外してください。スピーカーユニット交換後は時計方向にクリック音がするまで、回転させて取り付けます。

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



SPEAKER PARTS LIST (SX-NA94 -> YUSTNC)

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	87-NSE-001-019		PANEL,FR R
2	87-NSE-002-019		PANEL,FR L
3	87-NSE-003-019		PANEL,DUCT R
4	87-NSE-004-019		PANEL,DUCT L
5	87-NSE-610-019		SPKR,CORD
6	87-NSE-014-019		GRILLE,FRAME ASSY L
7	87-NSE-012-019		GRILLE,FRAME ASSY R
8	87-NSE-602-019		SPKR,W 160
9	87-NSE-604-019		SPKR,T 80

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

アイワ株式会社
AIWA CO.,LTD.

9301946, 75038

Tokyo Japan

〒110 東京都台東区池之端1—2—11 ☎03（3827）3111 （代表）

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V18295

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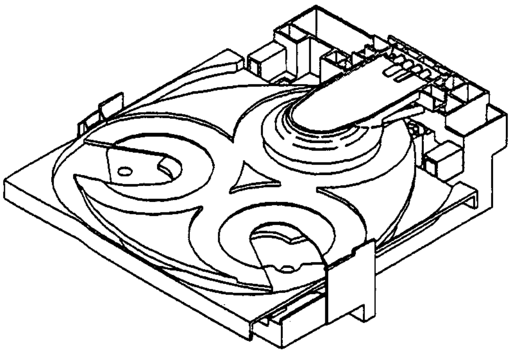
4ZG-1Z



CD MECHANISM

- BASIC CD MECHANISM: KSM-2 131 BAM / 3ZG-2C7N

•TYPE: English,Japanese

BASIC NAME	DERIVATION NAME							
4ZG-1Z	1D	2D	1MD	–		–	–	–

S/M Code No. 09-973-187-50T (Service Manual)
S/M Code No. 09-984-270-60T (Correction)

SERVICE MANUAL

安全に修理(補修)をするために

修理の前に「安全に修理(補修)をするために」をよくお読みの上、正しく修理を行ってください。このサービスマニュアルでは、お客様が製品を安全に正しくお使いいただき、お客様や他の人々への危害や財産への損害を未然に防止するために、修理する場合必ず下記の項目をお守りください。

⚠警告

警告に示された次の内容を必ずお守りください。
☞もし守られないと、火災や感電、けがなどの重度の損害を負う原因となります。

1.⚠安全規格部品注意文
・製品の安全性を維持する為の重要部品で、安全上特別な規格で作られています。
このマークの部品を交換する時は必ず指定の部品を使用してください。

2.指定部品を使用すること。
セットの部品は難燃性や耐電圧など安全上の特性を持ったものとなっています。従って交換部品は、使用されていたものと同じ特性の部品を使用すること。特に回路図、部品表に⚠印で指定されている安全上重要な部品は必ず指定のものをご使用ください。

3.電源コードを含むＡＣ1次側のリード線の被覆を傷つけたり、溶かしたりしないこと。

4.感電に注意すること。
内部には高電圧の部分がありますので通電時の取り扱いに際しては注意してください。

5.次の各項目は修理前と必ず同じであること。
1）ワイヤーの半田付け状態（特にＡＣ1次側の空間距離）
2）ワイヤーの引き回しおよび束線状態等
3）ワイヤーの種類
4）各種絶縁物の取付状態

7.部品の取り付けや配線の引き回しはもとどおりにすること。
安全上、チューブやテープなどの絶縁材料を使用したり、プリント基板から浮かしてとりつけた部品があります。また、内部配線は引き回しやクランパーによって発熱部品や高圧部品に接近しないよう配慮されていますので、これらは必ずもとどおりにすること。

⚠注意

この表示を無視して、誤った取り扱いをすると、人が傷害を負ったり物的損害が発生する可能性があります。

1.注意事項を守ること。
サービスの時特に注意を要する箇所につきましては、キャビネット、シャーシ、部品などにラベルや捺印で注意事項を表示しています。これらの注意書きおよび取扱説明書等の注意事項を必ず守ること。

2.スペック銘板・注意ラベル・ヒューズラベル等の表示文字を汚して読みにくくならないこと。

3.基板パターンの裏付け部品の修理等を行う場合、パターンや部品にボンドを塗布してプリント基板にしっかり固定すること。

4.サービス後は安全点検すること。
サービスのために取り外したネジ、部品、配線がもとどおりになっているか、サービスした個所の周辺を劣化させてしまったところがないかなどを点検すること。（ワイヤーの半田付け、引き回し、束線、種類、空間距離）

5.修理（補修）時に、レーザー出力部に接近しないでください。やむなく接近する場合は、目を閉じてください。レーザービームに接近することが必要になった場合、光学ピックアップブロックの対物レンズの表面から30cm以上離れていることを確認してください。

ギヤ、メインカムの位相の合わせ方

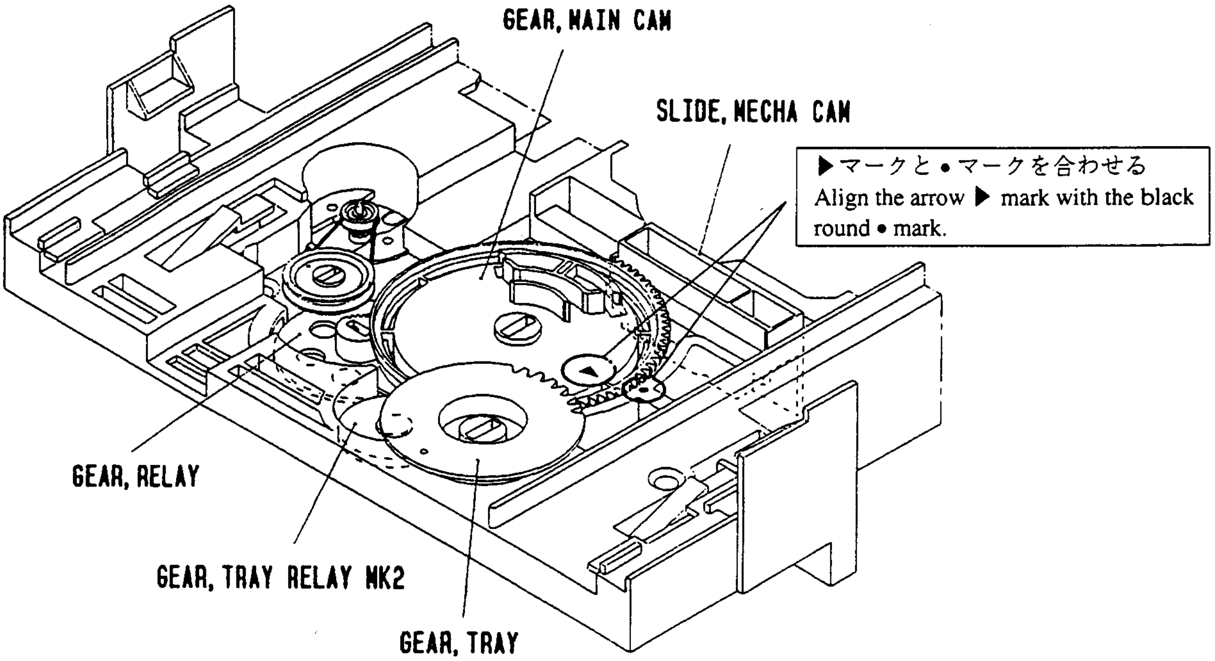
1) CHAS, MECHのツメを下側に押し、TRAYを外す。
2) 下図の様にGEAR, MAIN CAMの矢印とCHAS, MECHAの点印を合わせる。
3) SLIDE, MECH CAMが右側の位置にある事を確認し、TRAYをゆっくり挿し込んで下さい。

注意: GEAR, MAIN CAMの位相がズレている場合、チャッキング及びトレーが誤動作を起こします。

How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



▶マークと●マークを合わせる
Align the arrow ▶ mark with the black round ● mark.

光学ブロック (KSS-213B) 交換時の注意

光学系ブロック内のレーザーダイオードは、衣服や人体に帯電した静電荷等で電位差を生じることにより、静電破壊することがあります。人体アース、作業台のアースをとり、衣服が触れぬよう注意して下さい。

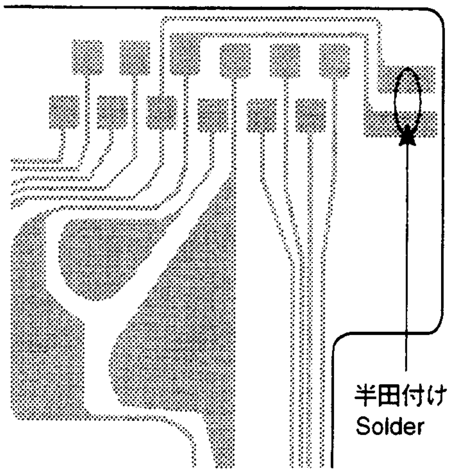
1) コネクターを接続後、右図に示すハンダ付けを取り除いて下さい。

Precaution to replace Optical block (KSS-213B)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



ELECTRICAL MAIN PARTS LIST

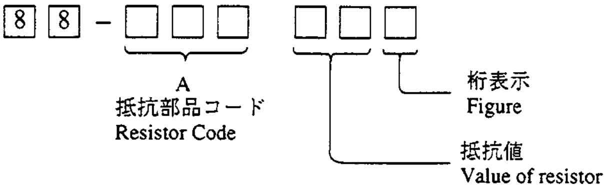
DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
IC			
	87-A20-446-010	1E	C-IC,LA9241ML
	87-A20-459-010	2A	C-IC,LC78622ED
	87-A20-445-010	1F	IC,BA5936
TRANSISTOR			
	87-A30-066-080	0E	TR,2SA1175FE
	87-A30-076-080	0E	C-TR,2SC3052F
	87-A30-047-080	0E	TR,CSD655E
	87-026-609-080	0E	TR,KTA1266GR
	87-A30-073-080	0E	C-TR,RT1N 141C
	87-A30-039-040	0E	C-TR,2SD1383K<1MD>
DIODE			
	87-002-564-080	0E	DIODE,1SS133-RA
3CD C.B			
	84-ZG1-244-210	1A	CABI,OPTICAL
C11	87-012-393-080	0E	C-CAP,S 0.22-16 K W5R CM/CB
C12	87-012-157-080	0E	C-CAP,S 330P-50 J CH GRM
C13	87-016-369-080	0E	C-CAP,S 0.033-25 K B
C14	87-A10-201-080	0E	C-CAP,S 0.33-16 K B
C15	87-010-590-080	0E	C-CAP,S 0.015-16 K R
C16	87-016-369-080	0E	C-CAP,S 0.033-25 K B
C17	87-010-181-080	0E	C-CAP,S 1800P-50 K B
C18	87-016-369-080	0E	C-CAP,S 0.033-25 K B
C19	87-010-198-080	0E	C-CAP,S 0.022-25 K B
C20	87-010-178-080	0E	C-CAP,S 1000P-50 K B
C21	87-012-393-080	0E	C-CAP,S 0.22-16 K W5R CM/CB
C22	87-016-083-080	0E	C-CAP,S 0.15-16 K R
C23	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C24	87-010-186-080	0E	C-CAP,S 4700P-50 K B
C25	87-010-400-040	0E	CAP,E 0.47-50 SME
C26	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C27	87-010-382-040	0E	CAP,E 22-25 SME
C28	87-010-403-040	0E	CAP,E 3.3-50 SME
C29	87-010-184-080	0E	C-CAP,S 3300P-50 K B
C30	87-010-146-080	0E	C-CAP,S 2P-50 C CH GRM
C31	87-010-186-080	0E	C-CAP,S 4700P-50 K B
C32	87-010-152-080	0E	C-CAP,S 8P
C33	87-016-081-080	0E	C-CAP,S 0.1-16 K R
C35	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C37	87-010-405-080	0E	CAP,E 10-50 M SME
C38	87-010-263-080	0E	CAP,E 100-10 SME
C39	87-016-369-080	0E	C-CAP,S 0.033-25 K B
C40	87-010-401-080	0E	CAP,E 1-50 M SME
C41	87-A10-201-080	0E	C-CAP,S 0.33-16 K B
C42	87-010-263-080	0E	CAP,E 100-10 SME
C43	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C44	87-010-263-080	0E	CAP,E 100-10 SME
C46	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C47	87-010-260-080	0E	CAP,E 47-25 SME
C48	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C49	87-010-404-080	0E	CAP,E 4.7-50 M SME
C50	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C51	87-010-263-040	0E	CAP,E 100-10 M SME
C101	87-016-081-080	0E	C-CAP,S 0.1-16 K R
C102	87-016-081-080	0E	C-CAP,S 0.1-16 K R
C103	87-010-321-080	0E	C-CAP,S 82P-50 J CH
C104	87-012-154-080	0E	C-CAP,S 150P-50 J CH GRM
C105	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C109	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C111	87-010-312-080	0E	C-CAP,S 15P
C112	87-010-154-080	0E	C-CAP,S 10P-50 D CH
C113	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C115	87-010-404-080	0E	CAP,E 4.7-50 M SME
C116	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C117	87-010-263-040	0E	CAP,E 100-10 M SME
C118	87-010-178-080	0E	C-CAP,S 1000P-50 K B
C119	87-010-154-080	0E	C-CAP,S 10P-50 D CH
C121	87-010-405-080	0E	CAP,E 10-50 M SME
C122	87-010-405-080	0E	CAP,E 10-50 M SME
C123	87-012-157-080	0E	C-CAP,S 330P-50 J CH GRM
C124	87-012-157-080	0E	C-CAP,S 330P-50 J CH GRM
C131	87-010-382-080	0E	CAP,E 22-25 M SME
C191	87-010-263-040	0E	CAP,E 100-10 M SME
C301	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C302	87-010-382-080	0E	CAP,E 22-25 M SME
C501	87-010-381-080	0E	CAP,E 330-16 SME
C502	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C504	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C505	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C506	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C507	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C509	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C510	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C603	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C610	87-010-405-080	0E	CAP,E 10-50 M SME
C611	87-010-405-080	0E	CAP,E 10-50 M SME
C701	87-010-405-080	0E	CAP,E 10-50 M SME
C705	87-010-197-080	0E	C-CAP,S 0.01-25 K B
C706	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
C711	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C712	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C713	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C721	87-010-322-080	0E	C-CAP,S 100P-50 J CH
C901	87-010-260-080	0E	CAP,E 47-25 SME
C902	87-010-196-080	0E	C-CAP,S 0.1-25 Z F C2012
CON3	84-ZG1-648-010	1A	CONN ASSY,6P<1MD,1D>
FC1	85-NFT-611-110	1A	FF-CABLE 16P-1.0
FC4	84-ZG1-614-210	1A	F-CABLE,5P 1.25 210MM
FC5	84-ZG1-630-010	0E	CABLE FFC 6P-1.25<2D>
L11	87-005-602-080	0E	COIL,10UH J LAV35
L101	87-005-614-080	0E	COIL,100UH
L102	87-005-602-080	0E	COIL,10UH J LAV35
LED901	87-A40-123-010	0E	LED,SLZ-8128A-01-B
M601	87-045-305-010	1D	MOT,RF-500TB
SW701	87-036-109-010	0E	SW,MICRO SPPB61
SW702	87-036-109-010	0E	SW,MICRO SPPB61
X101	87-A70-046-010	--	VIB,XTAL 16.934MHZ
LED C.B			
LED701	87-A40-316-080	0E	LED,SLR-56PCT31 GRN
LED702	87-A40-268-080	0E	LED,SLH-56DCT31 ORN
LED703	87-A40-268-080	0E	LED,SLH-56DCT31 ORN
LED704	87-A40-316-080	0E	LED,SLR-56PCT31 GRN
T-T C.B			
C401	87-018-214-080	0E	CAP,TC U 0.1-50 Z F SA
M401	87-045-364-010	1D	MOT,BCH3B
PS401	87-026-573-010	1B	SNSR,PHOTO GP1S53
MOTOR C.B<1MD,1D>			
M2	9X-262-513-210	2M	SLED MOTOR ASSY<1MD,1D>
PIN3	91-564-722-110	1C	CONNECTOR 6P<1MD,1D>
SW1	91-572-085-110	1B	LEAF SW<1MD,1D>

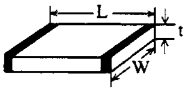
REF. NO	PART NO.	カンリ NO.	DESCRIPTION
DRIVE C.B<2D>			
M1	87-045-358-010	1F	MOT,RF-310TA 43<2D>
M2	87-045-356-010	1F	MOT,RF-310TA 30<2D>
SW1	87-A90-042-010	0E	SW,LEAF MSW-17310MVPO<2D>

○ チップ抵抗部品コード／CHIP RESISTOR PART CODE

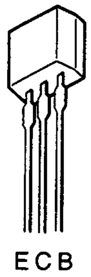
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding


8 8 - □□□ □□□
A
抵抗部品コード
Resistor Code
桁表示
Figure
抵抗値
Value of resistor

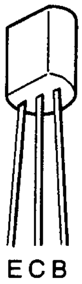
チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード ：A Resistor Code: A
				外形／Form	L	W	t	
1／16W	1608	±5%	CJ		1.6	0.8	0.45	108
1／10W	2125	±5%	CJ		2	1.25	0.45	118
1／8W	3216	±5%	CJ		3.2	1.6	0.55	128

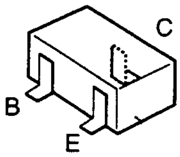
TRANSISTOR ILLUSTRATION



2SA1175

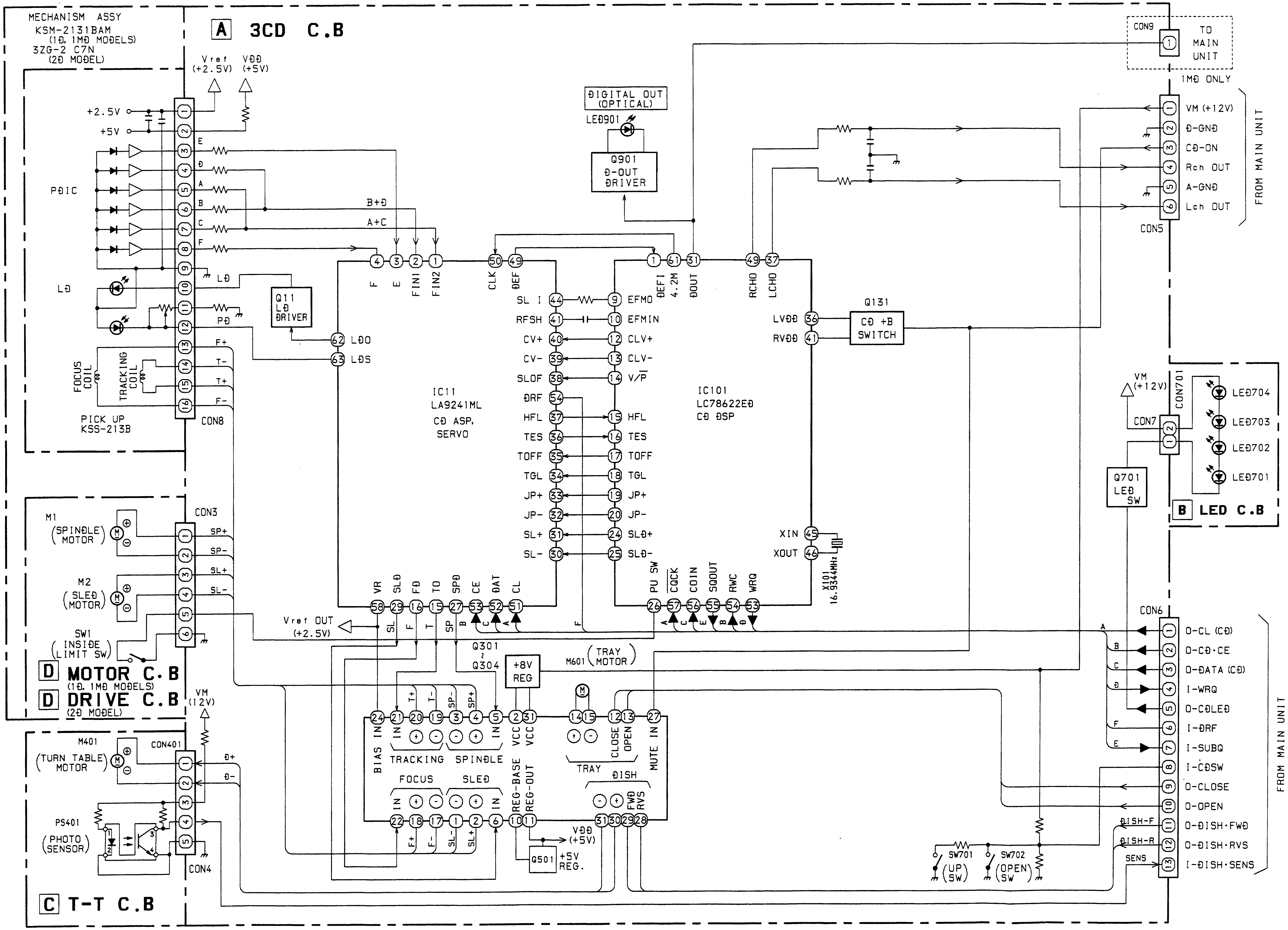


CSD655
KTA1266

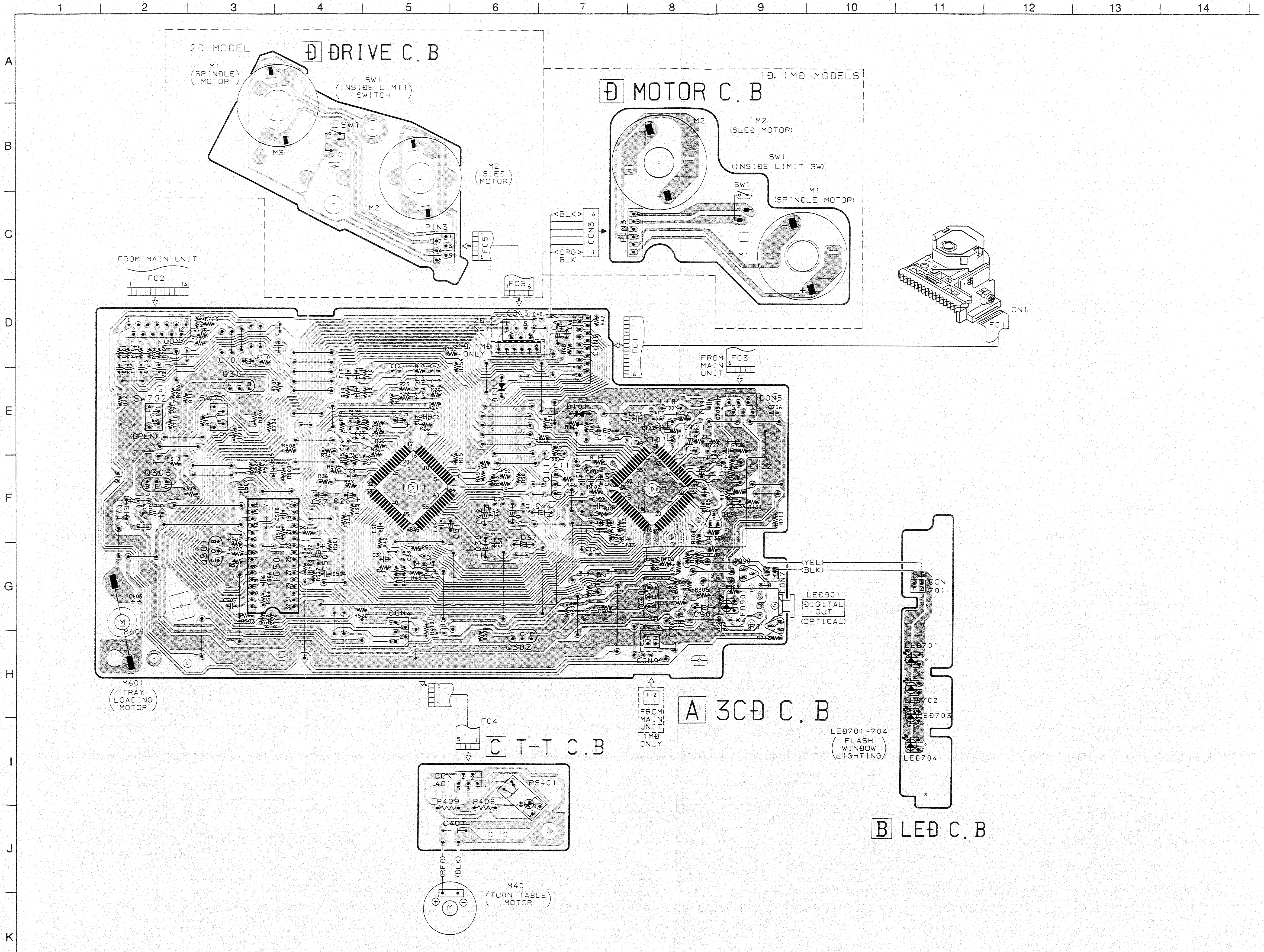


2SC3052
2SD1383
RT1N141C

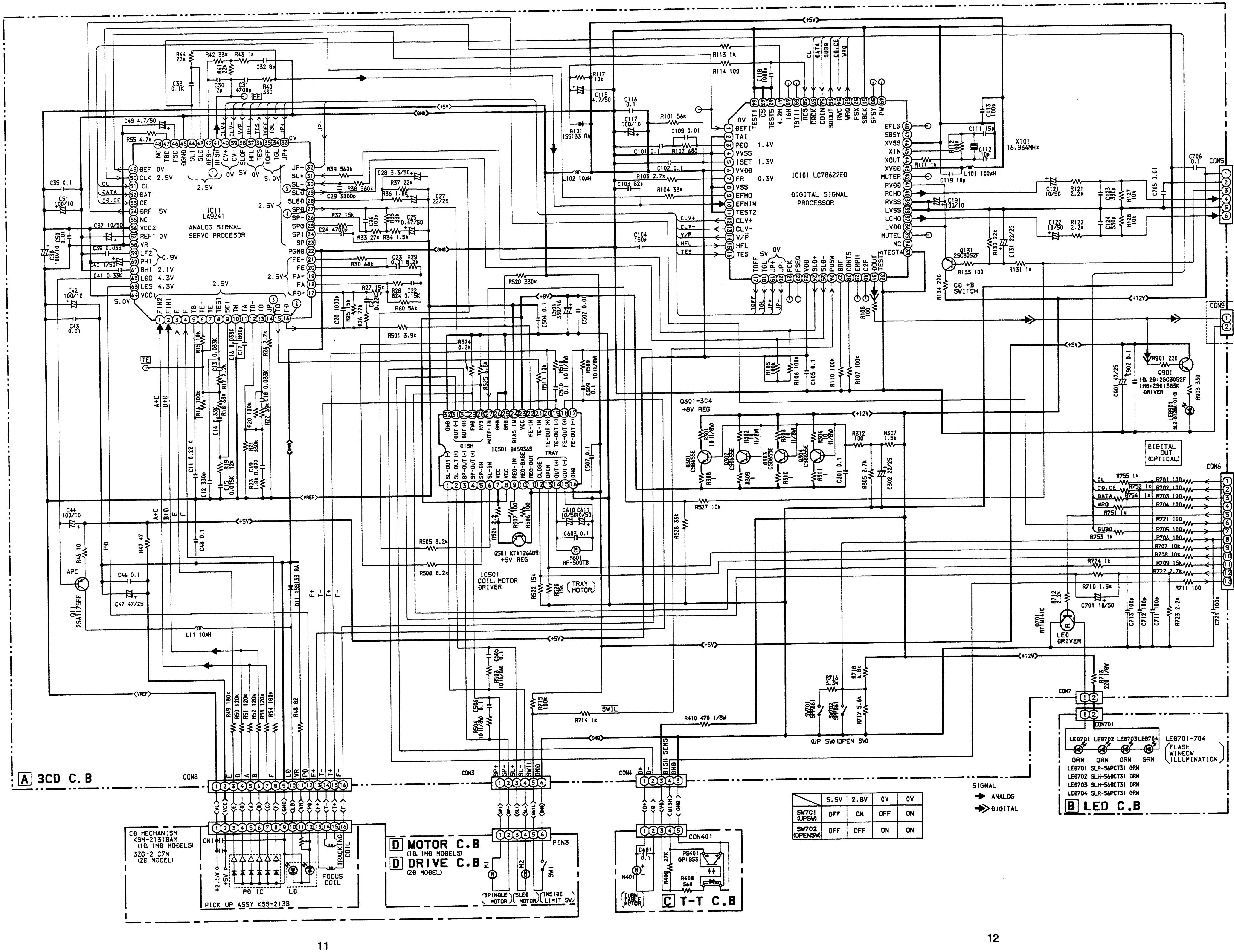
BLOCK DIAGRAM


MECHANISM ASSY
KSM-2131BAM
(1Ð, 1MÐ MODELS)
3ZG-2 C7N
(2Ð MODEL)
A 3CD C.B
Vref (+2.5V)
VÐÐ (+5V)
+2.5V
+5V
PÐIC
LÐ
PÐ
FOCUS COIL
TRACKING COIL
PICK UP
KSS-213B
CON8
E
Ð
A
B
C
F
B+Ð
A+C
F+
T-
T+
F-
Q11
LÐ
ÐRIVER
LÐO
LÐS
IC11
LA9241ML
CÐ ASP,
SERVO
CLK
ÐEF
SL I
RFSH
CV+
CV-
SLOF
ÐRF
HFL
TES
TOFF
TGL
JP+
JP-
SL+
SL-
FIN1
FIN2
VR
SLÐ
FÐ
TO
SPÐ
CE
ÐAT
CL
IC101
LC78622EÐ
CÐ ÐSP
EFMO
EFMIN
CLV+
CLV-
V/P̄
SLÐ+
SLÐ-
ÐEFI
4.2M
ÐOUT
RCHO
LCHO
LVÐÐ
RVÐÐ
XIN
XOUT
X101
16.9344MHz
PU SW
CQCK
COIN
SQOUT
RWC
WRQ
ÐIGITAL OUT
(OPTICAL)
LEÐ901
Q901
Ð-OUT
ÐRIVER
Q131
CÐ +B
SWITCH
CON9
TO
MAIN
UNIT
1MÐ ONLY
CON5
VM (+12V)
Ð-GNÐ
CÐ-ON
Rch OUT
A-GNÐ
Lch OUT
FROM MAIN UNIT
VM
(+12V)
CON7
CON701
LEÐ704
LEÐ703
LEÐ702
LEÐ701
Q701
LEÐ
SW
B LED C.B
CON6
O-CL (CÐ)
O-CÐ·CE
O-ÐATA (CÐ)
I-WRQ
O-CÐLEÐ
I-ÐRF
I-SUBQ
I-CÐSW
O-CLOSE
O-OPEN
O-ÐISH·FWÐ
O-ÐISH·RVS
I-ÐISH·SENS
ÐISH-F
ÐISH-R
SENS
FROM MAIN UNIT
CON3
M1
(SPINÐLE MOTOR)
M2
(SLEÐ MOTOR)
SW1
(INSIÐE LIMIT SW)
SP+
SP-
SL+
SL-
D MOTOR C.B
(1Ð, 1MÐ MODELS)
D DRIVE C.B
(2Ð MODEL)
Vref OUT
(+2.5V)
Q301
~
Q304
+8V
REG
M601 (TRAY MOTOR)
BIAS IN
IN
TRACKING
SPINÐLE
FOCUS
SLEÐ
VCC
REG-BASE
REG-OUT
TRAY
ÐISH
CLOSE
OPEN
MUTE IN
FWÐ
RVS
VÐÐ
(+5V)
Q501
+5V
REG.
VM
(12V)
M401
(TURN TABLE MOTOR)
CON401
Ð+
Ð-
PS401
(PHOTO SENSOR)
CON4
C T-T C.B
SW701
(UP SW)
SW702
(OPEN SW)

WIRING


1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I
J
K
2Đ MODEL
Đ ĐRIVE C.B
M1 (SPINĐLE MOTOR)
SW1 (INSIĐE LIMIT SWITCH)
M3
M2 (SLEĐ MOTOR)
PIN3
FC5
1Đ, 1MĐ MODELS
Đ MOTOR C.B
M2 (SLEĐ MOTOR)
SW1 (INSIĐE LIMIT SW)
M1 (SPINĐLE MOTOR)
<BLK>
<ORG> BLK
CON3
PIN3
CN1
FC1
FROM MAIN UNIT
FC2
2Đ ONLY
1Đ, 1MĐ ONLY
CON6
CON8
FROM MAIN UNIT
FC3
CON5
SW702
SW701
(OPEN)
Q304
Q303
IC1
IC101
IC501
Q501
CON4
Q302
CON7
(YEL)
(BLK)
CON 701
LEĐ901 ĐIGITAL OUT (OPTICAL)
CON9
M601 (TRAY LOAĐING MOTOR)
FROM MAIN UNIT 1MĐ ONLY
A 3CĐ C.B
FC4
C T-T C.B
CON 401
PS401
R409
R408
C401
(REĐ)
(BLK)
M401 (TURN TABLE MOTOR)
LEĐ701
LEĐ702
LEĐ703
LEĐ704
LEĐ701-704 (FLASH WINĐOW LIGHTING)
B LEĐ C.B

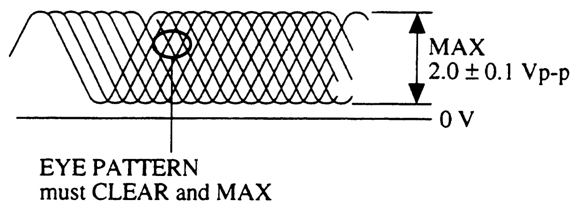
SCHEMATIC DIAGRAM


IC11 LA9241 ANALOG SIGNAL SERVO PROCESOR
IC101 LC78622E0 DIGITAL SIGNAL PROCESSOR
IC501 BA5936S
IC501 COIL MOTOR DRIVER
Q501 KTA1266GR +5V REG
Q301-304 +8V REG
Q11 2SA1175FE
APC
X101 16.934MHz
Q131 2SC3052F
CD +B SWITCH
Q901 1D, 2D:2SC3052F 1MD:2SD1383K DRIVER
LED901 SLZ-8128C-01-B
DIGITAL OUT (OPTICAL)
1MD ONLY
CON9 TO MAIN UNIT
CON5 VM (+12V) D-GND CD ON R CH A-GND L CH FROM MAIN UNIT
CON6 O-CL (CD) O-CDCE O-DATA CD I-WRQ O-CDLE I-DRF I-SUBQ I-CDSW O-CLOSE O-OPEN O-DISH FWD O-DISH RVS I-DISH SENS FROM MAIN UNIT
Q701 RT1N141C LED DRIVER
M601 RF-500TB
TRAY MOTOR
SW701 SPPB61 SW702 SPPB61
(UP SW) (OPEN SW)
CON7
CON701
LED701 LED702 LED703 LED704
GRN ORN ORN GRN
LED701-704 FLASH WINDOW ILLUMINATION
LED701 SLR-56PCT31 GRN
LED702 SLH-56BCT31 ORN
LED703 SLH-56BCT31 ORN
LED704 SLR-56PCT31 GRN
B LED C.B
A 3CD C.B
CON8
CON3
CON4
CN1
CD MECHANISM KSM-2131BAM (1D, 1MD MODELS) 3ZG-2 C7N (2D MODEL)
PD IC
LD
FOCUS COIL
TRACKING COIL
PICK UP ASSY KSS-213B
D MOTOR C.B (1D, 1MD MODELS)
D DRIVE C.B (2D MODEL)
PIN3
SPINDLE MOTOR
SLED MOTOR
INSIDE LIMIT SW
M401
TURN TABLE MOTOR
CON401
PS401 GP1S53
C T-T C.B
SIGNAL
ANALOG
DIGITAL

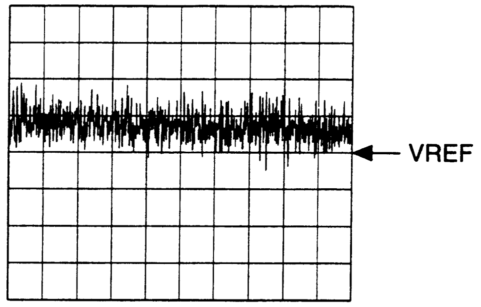
	5.5V	2.8V	0V	0V
SW701 (UPSW)	OFF	ON	OFF	ON
SW702 (OPENSW)	OFF	OFF	ON	ON

WAVE FORM

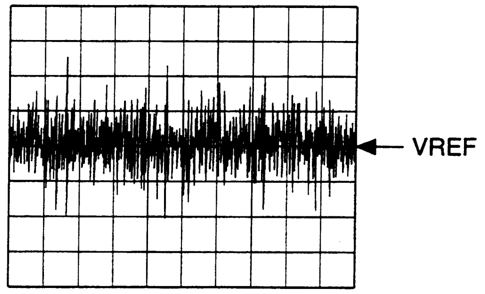
① IC11 Pin ㊶ (RFSM) VOLT/DIV: 0.5V TIME/DIV: 1μS



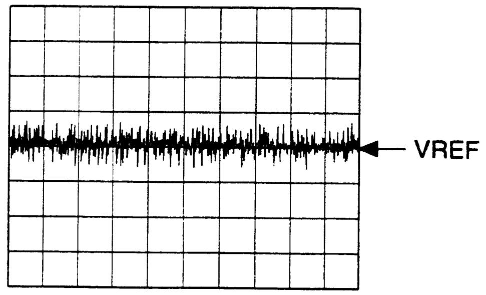
② IC11 Pin ⑯ (FD) VOLT/DIV: 100mV TIME/DIV: 1mS



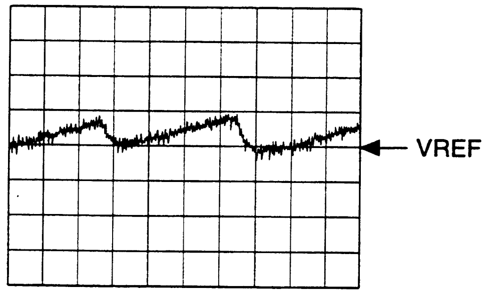
③ IC11 Pin ⑮ (TO) VOLT/DIV: 100mV TIME/DIV: 1mS



④ IC11 Pin ㉗ (SPD) VOLT/DIV: 100mV TIME/DIV: 1mS

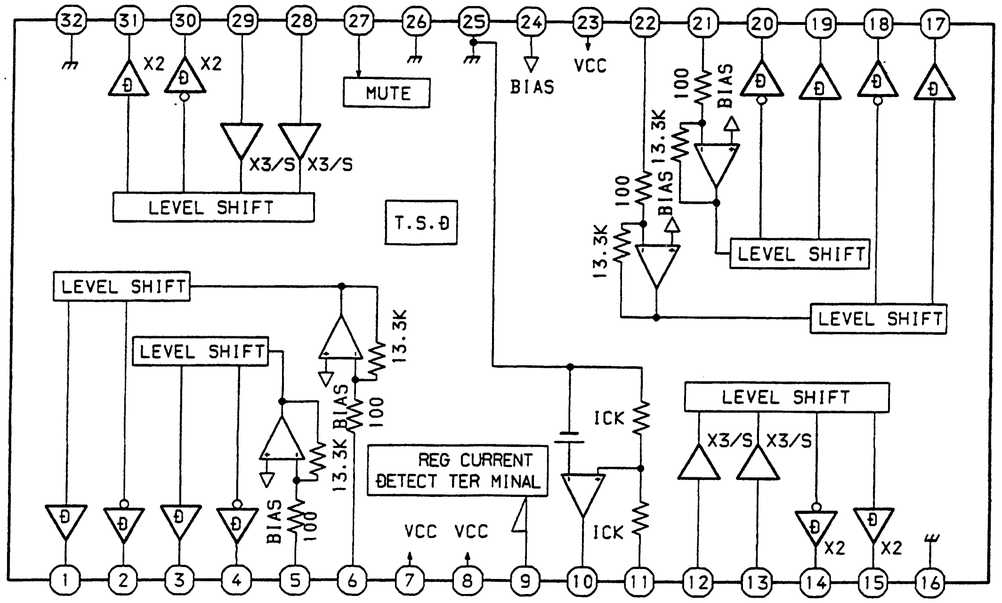


⑤ IC11 Pin ㉙ (SLD) VOLT/DIV: 200mV TIME/DIV: 2S



IC BLOCK DIAGRAM

IC, BA5936


32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
X2
X2
MUTE
BIAS
VCC
100
BIAS
13.3K
X3/S
X3/S
LEVEL SHIFT
T.S.Đ
100
BIAS
13.3K
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
LEVEL SHIFT
13.3K
BIAS
100
13.3K
ICK
REG CURRENT
DETECT TER MINAL
LEVEL SHIFT
X3/S
X3/S
BIAS
100
VCC
VCC
ICK
X2
X2
1
2
3
4
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14
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16

IC DESCRIPTION

IC, LA9241M

端子番号	端子名称	I/O	機能説明
1	FIN2	I	ピックアップのフォトダイオード接続用ピン。FIN1ピンとの加算でRF信号を生成し、減算でFE信号を生成する。
2	FIN1	I	ピックアップのフォトダイオード接続用ピン。
3	E	I	ピックアップのフォトダイオード接続用ピン。Fピンとの減算でTE信号を生成する。
4	F	I	ピックアップのフォトダイオード接続用ピン。
5	TB	I	TE信号のDC成分入力用ピン。
6	TE−	I	TE信号のゲイン設定用抵抗をTEピン間に接続するピン。
7	TE	O	TE信号出力ピン。
8	TESI	I	TES“Track Error Sence”コンパレータ入力ピン。TE信号をバンドパスし、入力する。
9	SCI	I	ショック検出用入力ピン。
10	TH	I	トラッキングゲイン時定数設定用ピン。
11	TA	O	TAアンプ出力ピン。
12	TD−	I	トラッキング位相補償定数をTD、VRピン間で構成するためのピン。
13	TD	I	トラッキング位相補償設定用ピン。
14	JP	I	トラッキングシャンプ信号(キックパルス)振幅設定用ピン。
15	TO	O	トラッキング制御信号出力ピン。
16	FD	O	フォーカシング制御信号出力ピン。
17	FD−	I	フォーカシング位相補償定数をFD、FAピン間で構成するためのピン。
18	FA	I	フォーカシング位相補償定数をFD−、FA−ピン間で構成するためのピン。
19	FA−	I	フォーカシング位相補償定数をFA、FEピン間で構成するためのピン。
20	FE	O	FE信号の出力ピン。
21	FE−	I	FE信号のゲイン設定用抵抗をFEピン間に接続するピン。
22	AGND	—	アナログ信号用GND。
23	NC	—	NO CONNECT
24	SP	O	CV+、CV−ピン入力信号のシングルエンド出力。
25	SPG	I	スピンドル12cmモード時ゲイン設定用抵抗接続ピン。
26	SP−	I	SPDピンとともにスピンドル位相補償定数接続用ピン。
27	SPD	O	スピンドル制御信号出力ピン。
28	SLEQ	I	スレッド位相補償定数接続用ピン。
29	SLD	O	スレッド制御信号出力ピン。
30、31	SL−、SL+	I	マイコンからのスレッド送り信号入力ピン。
32、33	JP−、JP+	I	DSPからのトラッキングジャンプ信号入力ピン。
34	TGL	I	DSPからのトラッキングゲインコントロール信号入力ピン。 TGL=「H」でゲインロー。
35	TOFF	I	DSPからのトラッキングオフコントロール信号入力ピン。 TOFF=「H」でオフ。
36	TES	O	TES信号をDSPへ出力するピン。
37	HFL	O	“High Frequency Level”は、メインビームの位置がピット上か、ミラー上かの判断に利用される。

端子番号	端子名称	I/O	機　能　説　明
38	SLOF	I	スレッドサーボオフコントロール入力ピン。
39、40	CV－、CV＋	I	DSPからのCLVエラー信号入力用ピン。
41	RFSM	O	RF出力ピン。
42	RFS－	I	RFSMピンとともにRFのゲイン設定およびEFM信号の3T補償定数設定用ピン。
43	SLC	O	“Slice Level Control”は、RF波形のDSPによるデータスライスのレベルを制御する出力ピン。
44	SLI	I	DSPによるデータスライスのレベルを制御するための入力ピン。
45	DGND	—	ディジタル系のGNDピン。
46	FSC	O	フォーカスサーチスムージングコンデンサ用出力ピン。
47	TBC	I	“Tracking Balance Control”EFバランス可変範囲用設定ピン。
48	NC	—	NO CONNECT
49	DEF	O	ディスクのディフェクト検出出力ピン。
50	CLK	I	基準クロック入力ピン。DSPの4.23MHzが入力される。
51	CL	I	マイコンコマンドクロック入力ピン。
52	DAT	I	マイコンコマンドデータ入力ピン。
53	CE	I	マイコンコマンドチップイネーブル入力ピン。
54	DRF	O	“Detect RF”RFレベル検出出力。
55	FSS	I	“Focus Serch Select”フォーカスサーチモード(基準電圧に対し±サーチ／＋サーチ)の切り換えピン。
56	VCC2	—	サーボ系、ディジタル系用VCCピン。
57	REFI	—	基準電圧用パスコン接続用ピン。
58	VR	O	基準電圧出力ピン。
59	LF2	I	ディスクのディフェクト検出時定数設定用ピン。
60	PH1	I	RF信号のピークホールド用コンデンサ接続用ピン。
61	BH1	I	RF信号のボトムホールド用コンデンサ接続用ピン。
62	LDD	O	APC回路出力ピン。
63	LDS	I	APC回路入力ピン。
64	VCC1	—	RF系VCCピン。

IC, LC78622E

端子番号	端子名称	I/O	機能説明	
1	DEFI	I	ディフェクト検出信号 (DEF) 入力端子。(未使用時、0Vに接続すること。)	
2	TAI	I	PLL用	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
3	PDO	O		外部VCO制御用位相比較出力端子。
4	VVSS	—		内蔵VCO用接地端子。必ず0Vに接続すること。
5	ISET	I		PDO出力の電流調整用抵抗接続端子。
6	VVDD	—		内蔵VCO用電源端子。
7	FR	I		VCO周波数レンジ調整用。
8	VSS	—	ディジタル系接地端子。必ず0Vに接続すること。	
9	EFMO	O	スライスレベルコントロール用	EFM信号出力端子。
10	EFMIN	I		EFM信号入力端子。
11	TEST2	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。	
12、13	CLV＋、CLK－	O	ディスクモータコントロール用出力。コマンドにより3値出力可能。	
14	V/$\overline{P}$	O	ラフサーボ／位相制御の自動切り換えモニタ出力端子。「H」でラフサーボ、「L」で位相サーボ。	
15	HFL	I	トラック検出信号入力端子。シュミット入力。	
16	TES	I	トラッキング誤差信号入力端子。シュミット入力。	
17	TOFF	O	トラッキングOFF出力端子。	
18	TGL	O	トラッキング・ゲイン切り換え用出力端子。「L」でゲインを上げる。	
19、20	JP＋、JP－	O	トラックジャンプコントロール用出力。コマンドにより3値出力可能。	
21	PCK	O	EFMデータ再生用クロックモニタ端子。位相ロック時、4.3218MHz。	
22	FSEQ	O	同期信号検出出力端子。EFM信号から検出した同期信号と内部生成の同期信号が一致した時に「H」。	
23	VDD	—	ディジタル系電源端子。	
24～28	CONT1～CONT5	I/O	汎用入出力端子1～5	マイコンからのシリアルデータコマンドで制御。使用しない場合、入力端子に設定して0Vに接続するか出力端子に設定してオープンにすること。
29	EMPH	O	ディエンファシス・モニタ出力端子。「H」の時ディエンファシス・ディスク再生中。	
30	C2F	O	C2フラグ出力端子。	
31	DOUT	O	ディジタルOUT出力端子。(EIAJフォーマット)	
32、33	TEST3、TEST4	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。	
34	N.C.	—	未使用端子。オープンで使用すること。	
35	MUTEL	O	Lチャネル1ビットDAC	Lチャネル用ミュート出力端子。
36	LVDD	—		Lチャネル用電源端子。
37	LCHO	O		Lチャネル出力端子。
38	LVSS	—		Lチャネル用接地端子。必ず0Vに接続すること。
39	RVSS	—	Rチャネル1ビットDAC	Rチャネル用接地端子。必ず0Vに接続すること。
40	RCHO	O		Rチャネル出力端子。
41	RVDD	—		Rチャネル用電源端子。
42	MUTER	O		Rチャネル用ミュート出力端子。
43	XVDD	—	水晶発振用電源端子。	

端子番号	端子名称	I/O	機　能　説　明
44	XOUT	O	16.9344MHz水晶振動子の接続端子。
45	XIN	I	
46	XVSS	—	水晶発振用接地端子。必ず0Vに接続すること。
47	SBSY	O	サブコードブロックの同期信号出力端子。
48	EFLG	O	C1、C2、1重、2重の訂正モニタ端子。
49	PW	O	サブコードP、Q、R、S、T、U、Wの出力端子。
50	SFSY	O	サブコードフレーム同期信号出力端子。サブコードがスタンバイした時、立下る。
51	SBCK	I	サブコード読み出しクロック入力端子。シュミット入力。(未使用時0Vに接続すること。)
52	— FSX	O	水晶発振から分周した7.35kHz同期信号出力端子。
53	WRQ	O	サブコードQ出力スタンバイ出力端子。
54	RWC	I	リード／ライト制御入力端子。シュミット入力。
55	SQOUT	O	サブコードQ出力端子。
56	COIN	I	マイコンからのコマンド入力端子。
57	$\overline{\text{CQCK}}$	I	コマンド入力取り込みクロックまたはSQOUTからのサブコード取り出しクロック入力端子。シュミット入力。
58	$\overline{\text{RES}}$	I	LC78622リセット入力端子。電源投入時に、一旦「L」にする。
59	TST11	O	テスト用出力端子。オープン (通常「L」出力) で使用すること。
60	16M	O	16.9344MHz出力端子。
61	4.2M	O	4.2336MHz出力端子。
62	TEST5	I	テスト用入力端子。プルダウン抵抗内蔵。必ず0Vに接続すること。
63	$\overline{\text{CS}}$	I	チップセレクト入力端子。プルダウン抵抗内蔵。非制御時、0Vに接続すること。
64	TEST1	I	テスト用入力端子。プルダウン抵抗はない。必ず0Vに接続すること。

注) 各電源端子 (VDD、VVDD、LVDD、RVDD、XVDD) には必ず同電位を供給すること。

IC, LA9241M

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE–	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD–	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD–	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA–	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE–	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	NC	—	No connection.
24	SP	O	Single ended output of the CV+ and CV– pin input signal.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP–	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL–, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP–, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	"High Frequency Level" is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS–	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	"Slice Level Control" is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	"Tracking Balance Control" EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	"Detect RF" RF level detector output.
55	FSS	I	"Focus Search Select" focus search mode (± search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

IC, LC78622E

Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	TEST2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLK−	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP−	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24~28	CONT1~CONT5	I/O	General purpose input/output pin 1 to 5.	The pin is controlled by the serial data command from microprocessor. When the pin is not used, set the pin to the input terminal and connect to 0V, or alternately set the pin to output terminal and leave the pin open.
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.	
30	C2F	O	C2 flag output pin.	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).	
32, 33	TEST3, TEST4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	$\overline{\text{RES}}$	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	TST11	O	Test signal output pin. Use this pin as open (normally L output).
60	16M	O	16.9344 MHz output pin.
61	4.2M	O	4.2336 MHz output pin.
62	TEST5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	TEST1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

TEST MODE

1. CDテストモードの起動方法
   ファンクションCDの釦を押しながら、ACプラグを挿入する。
   上記によりFL表示管が全て点灯し、テストモードが起動します。

2. CDテストモードの解除方法
   下記のいずれか1つの操作で解除します。
   - ファンクション釦を押す（CDファンクション釦以外）
   - パワーSW釦を押す。
   - ACプラグを抜く。

3. CDテストモードの機能説明
   テストモード起動後、各操作釦を押す事により次のNo1～No5の各モード機能が使用できます。

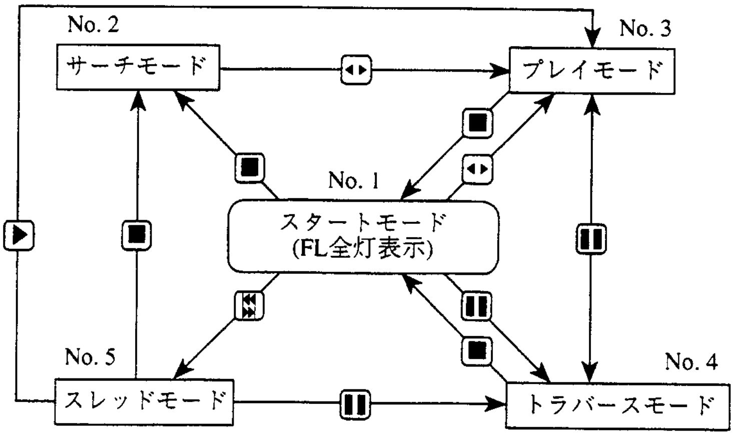
Mode/No.	操作	FL表示	動作	内容
スタートモード No.1	起動	全灯表示	● TEST MODE起動 ● CDブロック電源ON	● FL表示確認（全灯）
サーチモード No.2	■釦	CD--	● LASER DIODE常時発光 ● 連続フォーカスサーチ (PUレンズがフルスイングを繰り返す) ＊ 10分以上の連続フォーカスは避けて下さい。 ＊注1	● APC回路確認 ● レーザー電流測定 (レーザー電流コントロール、トランジスタのエミッターGND間の抵抗の両端。) FOCUS SERVO ● フォーカスラッチ波形確認 ● フォーカスエラー波形確認 (サーチモードではFOK/FZCは監視せず。)
プレイモード No.3	◀▶釦	CD11	● 通常再生 ● TOC READ出来ない場合 フォーカスサーチを続行 ＊注1	FOCUS SERVO/TRACKING SERVO CLV SERVO/SLED SERVO DRF確認
トラバースモード No.4	❚❚釦	CD11	● DISC通常再生中 1回押す トラッキングサーボOFF 2回押す トラッキングサーボON ＊注2	TRACKING SERVO ON/OFF トラッキングバランス (トラバース) 確認
スレッドモード No.5	⏮釦 ⏭	全灯表示	● ピックアップ外周へ移動 ● ピックアップ内周へ移動 ＊注3 (再生中は通常動作致します)	SLED SERVO SLEDメカ動作確認

＊注1 フォーカスサーチを連続して10分以上動作し続けるとドライバーICが発熱し保護回路が働く為、トラッキングサーボがかからない状態となる場合が有ります。この様な場合には、電源を切り約10分間放熱後、再スタートして下さい。

＊注2 「❚❚」状態で、「⏮」または「⏭」釦を押さない事。「❚❚」状態解除後、再生出来なくなります。「❚❚」状態で、「⏮」または「⏭」釦を押した場合には「■」釦を押しスタートモード(No.1)に戻して下さい。

＊注3 ピックアップが最内周、最外周の位置でも「⏮」または「⏭」釦を押している間はスレッドモータが回転する為、ギヤ破損に注意して下さい。

4. 操作概要
   下図の様にスタートモードから、矢印方向の流れで各モードの操作が行えます。モード変更は、下図の流れに従い行って下さい。



尚、DISC DIRECT PLAY釦を押した場合には、上図のPLAY釦を押した時と同様の動作となります。またプレイモード／トラバースモード時にopen/close釦により、トレイをopenさせた場合には、スタートモードに戻ります。

1. How to Activate CD Test Mode
   Insert the AC plug while pressing the function CD button.
   All FL display tubes will light up, and the test mode will be activated.

2. How to Cancel CD Test Mode
   Either one of the following operations will cancel the CD test mode.
   - Press the function button. (except CD function button)
   - Press the power switch button.
   - Disconnect the AC plug

3. CD Test Mode Functions
   When test mode is activated, the following mode functions from No.1 to No.5 can be used by pressing the operation keys.

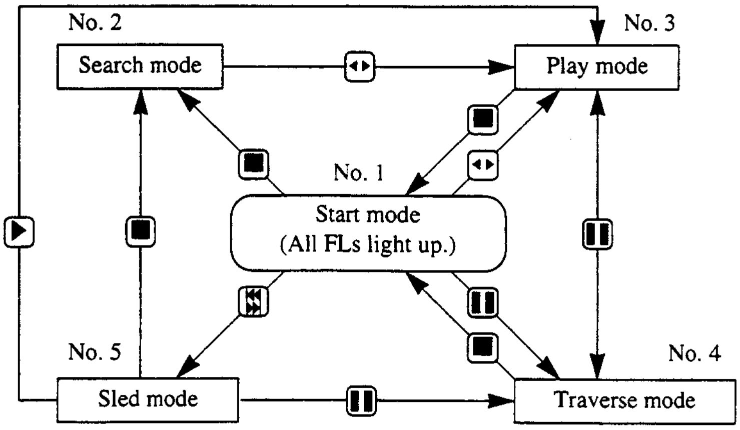
Mode/No.	Operation	FL display	Operation	Contents
Start mode No.1	Activation	All lamps light	• Test mode is activated. • CD block power is ON.	• FL display check (All displays light.)
Search mode No.2	■ key	CD--	• Laser diode turns always ON. • Continual focus search (The pickup lens repeats the full-swing up-down motion.) * Avoid continual searches that last for more than 10 minutes. * NOTE 1	• APC circuit check • Laser current measurement (Laser current control. Across a resistor connected between emitter and GND.) FOCUS SERVO • Check focus search waveform • Check focus error waveform (FOK/FZC are not monitored in the search mode)
Play mode No.3	◀▶ key	CD11	• Normal playback • Focus search is continued if TOC cannot be read. * NOTE 1	FOCUS SERVO/TRACKING SERVO CLV SERVO/SLED SERVO Check DRF
Traverse mode No.4	❚❚ key	CD11	• During normal disc playback Press once; tracking servo OFF Press twice; tracking servo ON * NOTE 2	TRACKING SERVO ON/OFF Tracking balance (traverse) check
Sled mode No.5	⏮ key ⏭	All lamps light	• Pickup moves to the outermost track • Pickup moves to the innermost track * NOTE 3 (During playback, machine operates normally.)	SLED SERVO Check SLED mechanism operation

* NOTE 1: There are cases when the tracking servo cannot be locked owing to the protection circuit being operated when heat builds up in the driver IC if the focus search is operated continually for more than 10 minutes. In these cases the power supply should be switched off for 10 minutes until heat has been reduced and then re-started.

* NOTE 2: Do not press the ⏮ or ⏭ keys when the machine is in the ❚❚ status is active. If they are pressed, playback will not be possible after the ❚❚ status has been canceled. If the ⏮ or ⏭ keys are pressed in the ❚❚ status, press the ■ key and return to the start mode (No.1).

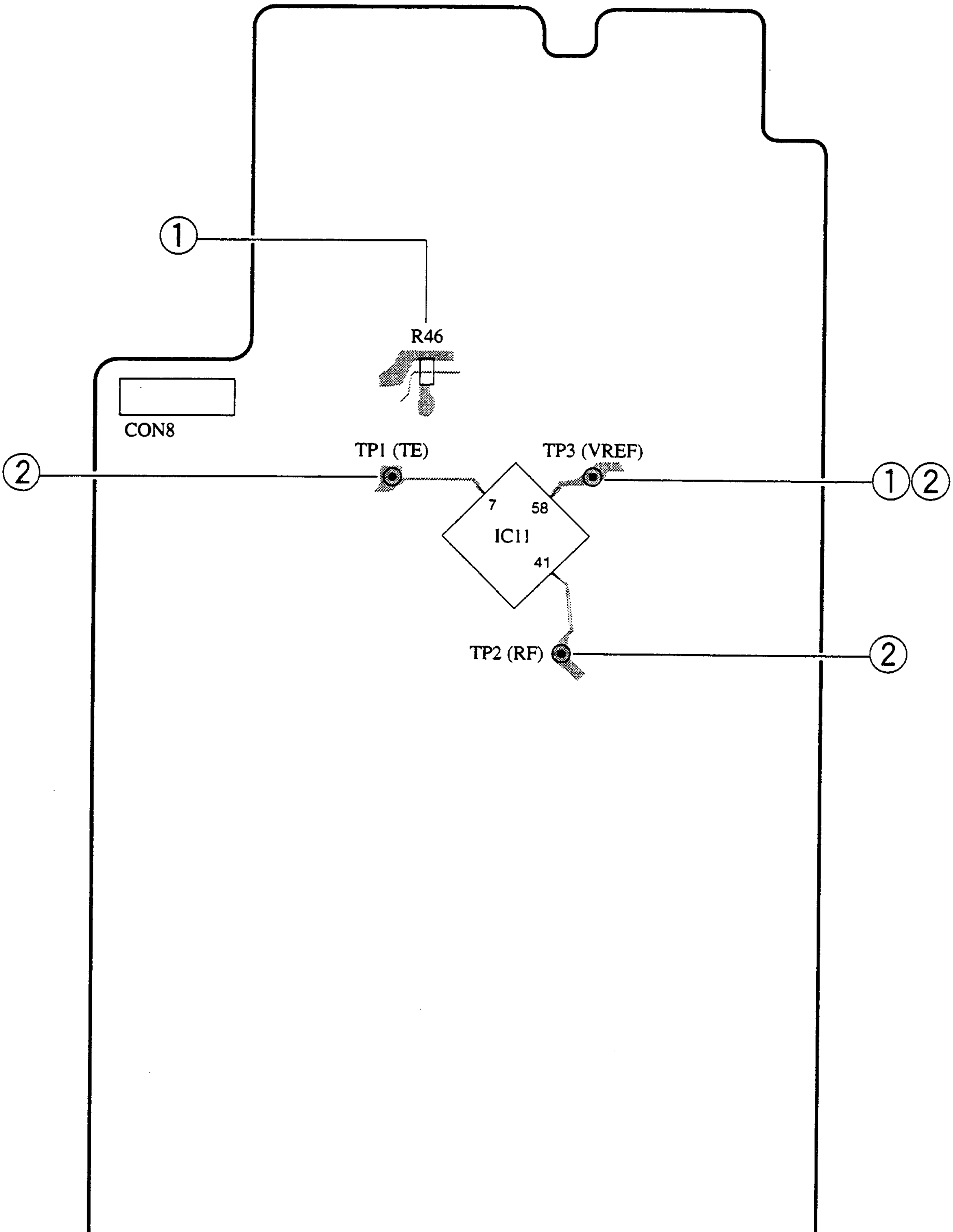
* NOTE 3: When pressing the ⏮ or ⏭ keys, take care to avoid damage to the gears. Because the sled motor is activated when the ⏮ or ⏭ keys are pressed, even when the pick-up is at the outermost or innermost track.

4. Operation Outline
   The operation of each mode is carried out in the direction of the arrows from the start mode as indicated in the following illustration.



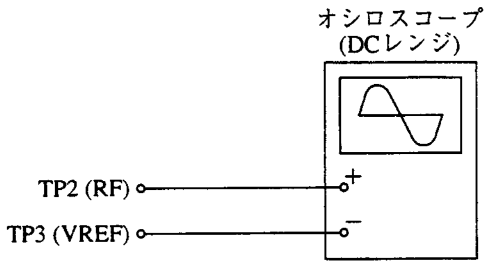
If the DISC DIRECT PLAY button is pressed, the machine performs the same operation as the PLAY button is pressed is shown. If the tray is opened by pressing OPEN/CLOSE button during Play mode or Traverse mode, the machine returns to the Start mode.

A 3CD C.B (PATTERN SIDE)

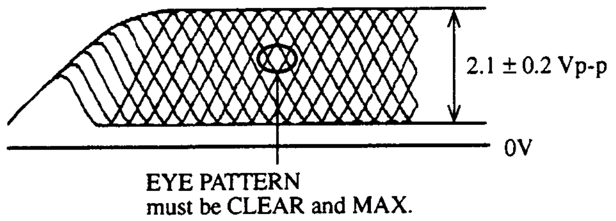

①
R46
CON8
②
TP1 (TE)
TP3 (VREF)
①②
7
58
IC11
41
TP2 (RF)
②

注意： ・(10：1) のプローブを接続して、調整して下さい。
・各調整には、オシロスコープの ⊖ 側を TP3 (VREF) に接続して下さい。

1. RF 波形の確認

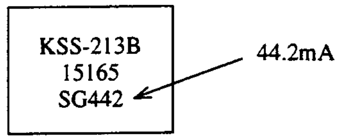


1) テストポイント TP2 (RF)、TP3 (VREF) にオシロスコープを接続する。
2) POWER スイッチを ON にする。
3) テストディスク TCD-782 (YEDS-18) を入れて 2 曲目を PLAY させる。
4) オシロスコープの波形の振幅が 2.1 Vp-p となり、かつ中央のひし形が、鮮明である事を確認する。



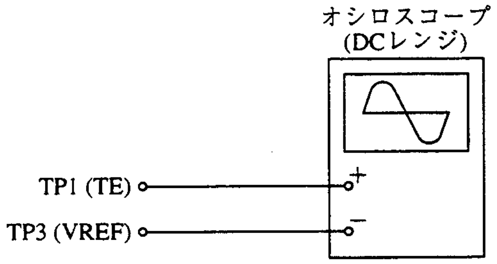
VOLT/DIV : 50mV
TIME/DIV : 0.5 μ S

注意： レーザー電流の確認は R46 (10 Ω の両端電圧) で行えます。レーザーピックアップの裏側のラベルの電流値に対して ± 6.0mA に入っていること。

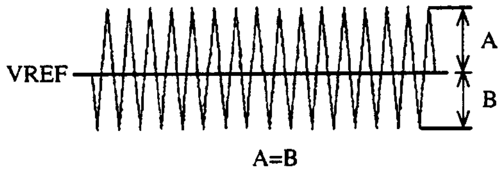


$$\text{レーザー電流Iop} = \frac{\text{R46の両端電圧}}{10\Omega}$$

2. トラッキング・バランス確認



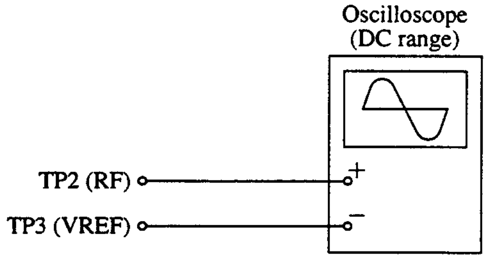
1) テストポイント TP1 (TE)、TP3 (VREF) にオシロスコープを接続する。
2) CD テストモードを起動する。
3) テストディスク TCD-782 (YEDS-18) を入れて、CD テストモードのトラバースモードにする。
4) オシロスコープのトラバース波形が、下図のように上下対称である事を確認する。
5) 確認後、CD テストモードを解除する。



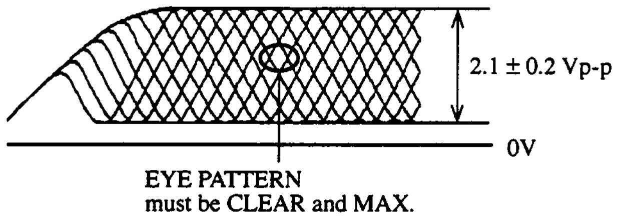
VOLT/DIV : 20mV
TIME/DIV : 1mS

Note:
- Connect a probe (10: 1) of the oscilloscope or the frequency counter to a test point.
- During adjustment, connect (⊖) pin of an oscilloscope to TP3 (VREF).

1. RF waveform Check

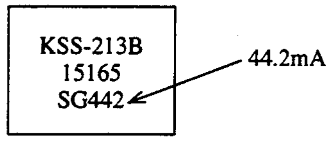


1) Connect an oscilloscope to test points TP2 (RF) and TP3 (VREF).
2) Turn on the power switch.
3) Insert test disc TCD-782 (YEDS-18) and play back the second program.
4) Confirm that the waveform at oscilloscope has amplitude of 2.1 Vp-p, and clear wedge area in its center.



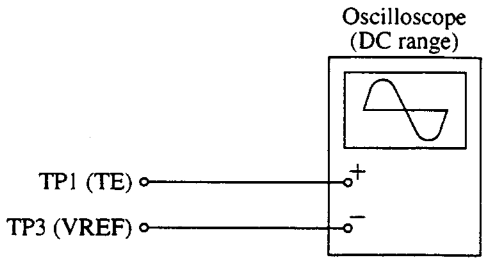
VOLT/DIV: 50mV
TIME/DIV: 0.5μS

Note: The current of the laser signal can be checked with the voltages on both sides of R46 (voltage across 10Ω). The difference for the specified value shown on the label must be within ± 6.0mA.

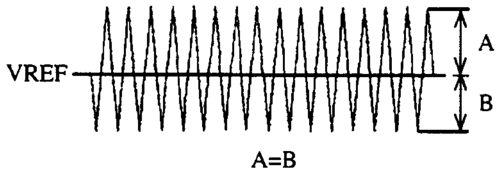


$$\text{Laser current Iop} = \frac{\text{Voltage across R46}}{10\Omega}$$

2. Tracking Balance Check

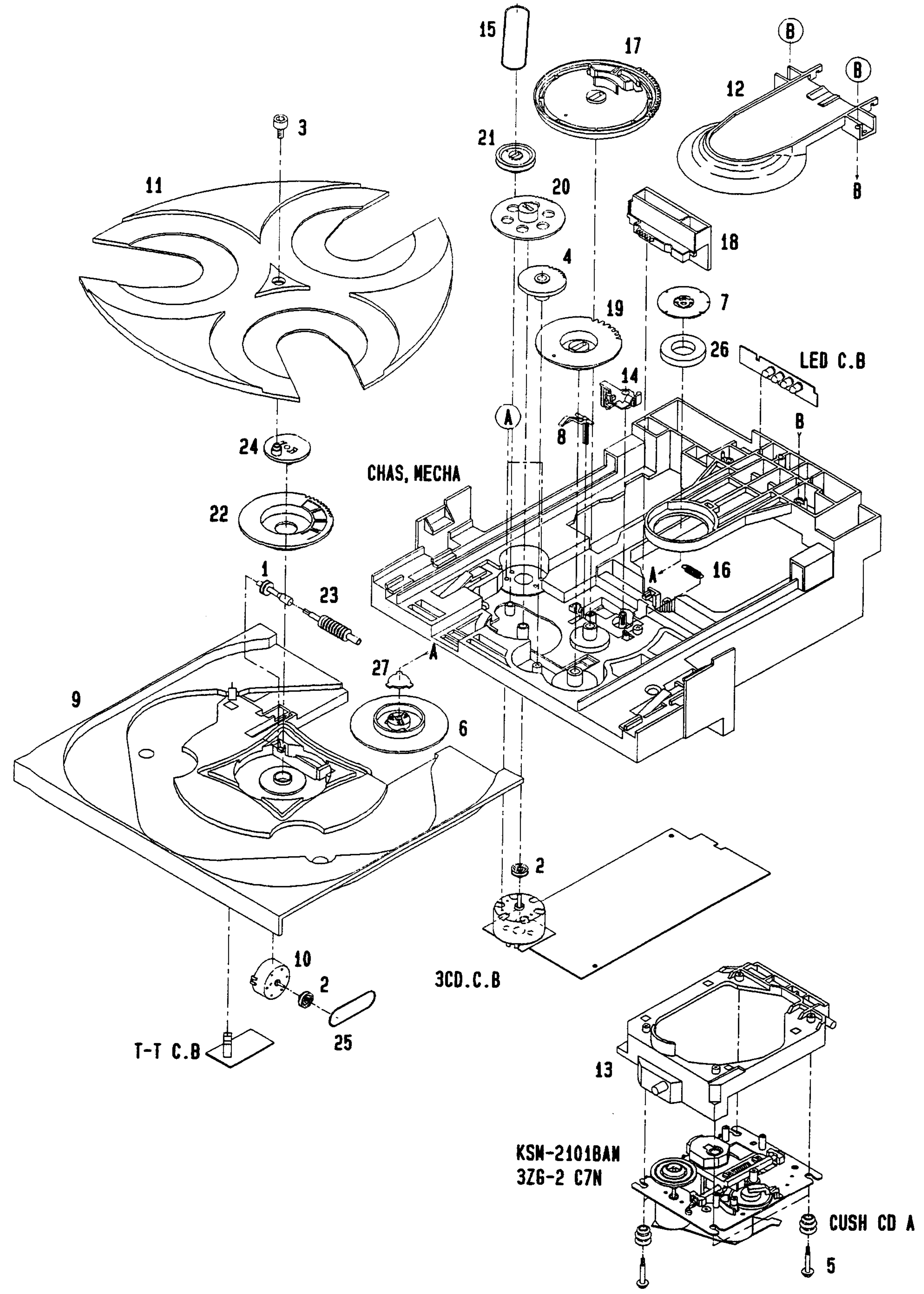


1) Connect an oscilloscope to test points TP1 (TE) and TP3 (VREF).
2) Start up the CD test mode.
3) Insert the test disc TCD-782(YEDS-18) and enter the traverse mode of the CD test mode.
4) Confirm that the traverse waveform on an oscilloscope is vertically symmetrical as shown in the figure below.
5) After confirming the waveform, release the CD test mode.



VOLT/DIV: 20mV
TIME/DIV: 1mS

MECHANICAL EXPLODED VIEW 1／1

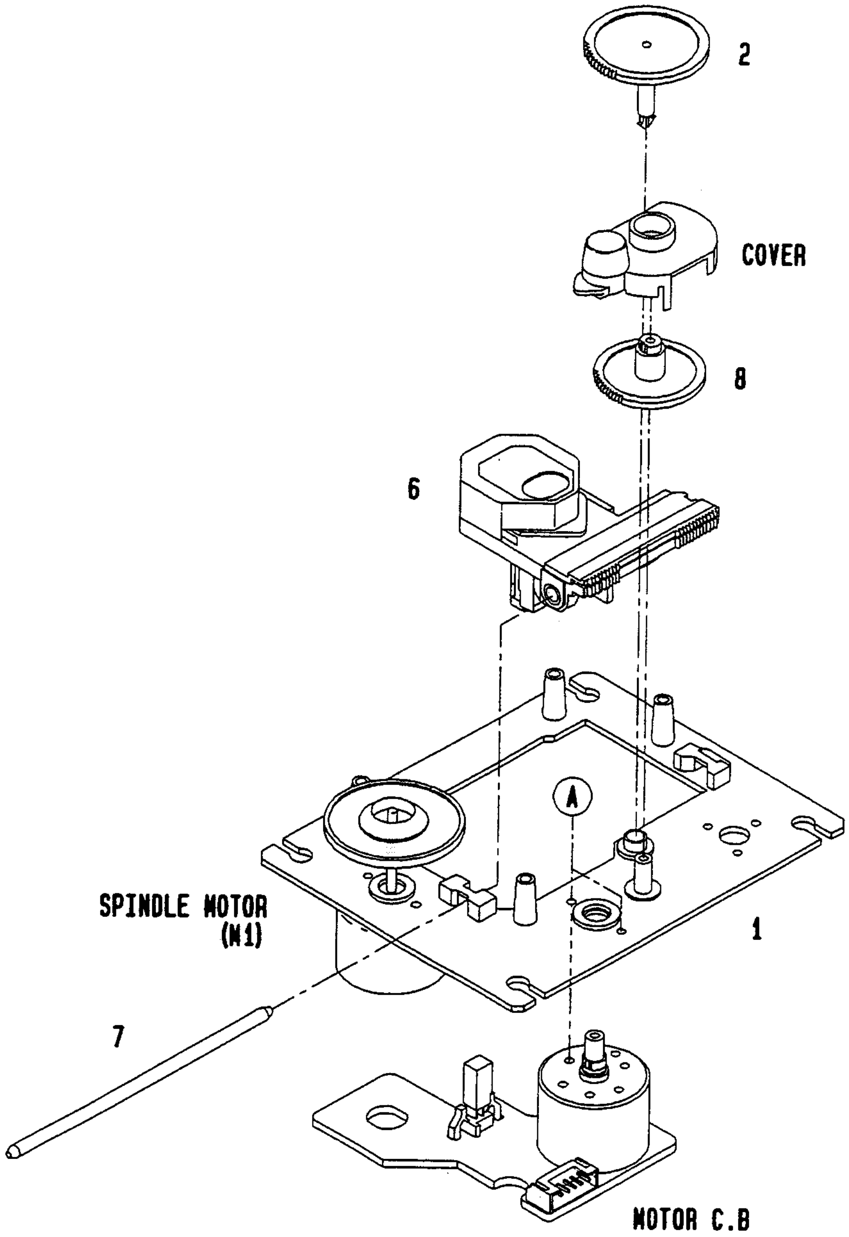


MECHANICAL PARTS LIST 1／1

DESCRIPTIONで判断できない物は “REFERENCE NAME LIST” を参照してください。
If can’t understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	84-ZG1-239-110	1A	PULLY,WORM N
2	81-ZG1-212-010	0E	PULLY,LOAD MO
3	81-ZG1-239-010	0E	S-SCREW,TT
4	81-ZG1-291-010	0E	GEAR,TRAY RELAY NO3
5	81-ZG1-271-010	0E	S-SCREW,MECH REAR
6	81-ZG1-277-210	1A	HLDR,MAGNET N
7	81-ZG1-229-110	0E	PLATE,MAGNET<1MD,1D>
7	81-ZG1-255-110	0E	PLATE,MAGNET MK2<1DM,2DM>
8	83-ZG3-213-010	0E	LVR,SW
9	84-ZG1-003-210	1M	TRAY,NO2-B
10	87-045-364-010	1D	MOTOR,(BCH3B14)
11	84-ZG1-005-110	1C	TURNTABLE,NO1
12	84-ZG1-011-010	1A	REFLECTOR,CD
13	84-ZG1-212-110	1A	HLDR,MECHA NO2
14	84-ZG1-208-010	0E	LEVER,CAM
15	84-ZG1-209-010	0E	BELT,SQ1.8-117.7
16	84-ZG1-211-010	0E	SPR-E CAM S
17	84-ZG1-215-210	1B	GEAR,MAIN CAM BLU
18	84-ZG1-216-210	1A	SLIDE,MECHA CAM YEL
19	84-ZG1-205-110	1A	GEAR,TRAY
20	84-ZG1-206-110	0E	GEAR,RELAY
21	84-ZG1-207-010	0E	PULLY,RELAY
22	84-ZG1-221-010	1A	GEAR,MAIN TT
23	84-ZG1-238-010	1A	GEAR,WORM N
24	84-ZG1-224-010	0E	LEVER,TT
25	84-ZG1-225-010	0E	BELT,SQ1.0-63.3
26	87-036-326-010	0E	MAGNET,CLAMPER 93<1MD,1D,1DM>
26	83-ZG3-602-010	0E	RING,MAG<2DM>
27	84-ZG1-248-010	0E	SPR-C,WORM
A	87-251-070-410	0E	U+2.6-3
B	87-067-703-010	0E	BVT 2+3-10 W/O SLOT

CD MECHANISM EXPLODED VIEW 1／1 (KSM-2131BAM <1D, 1MD>)

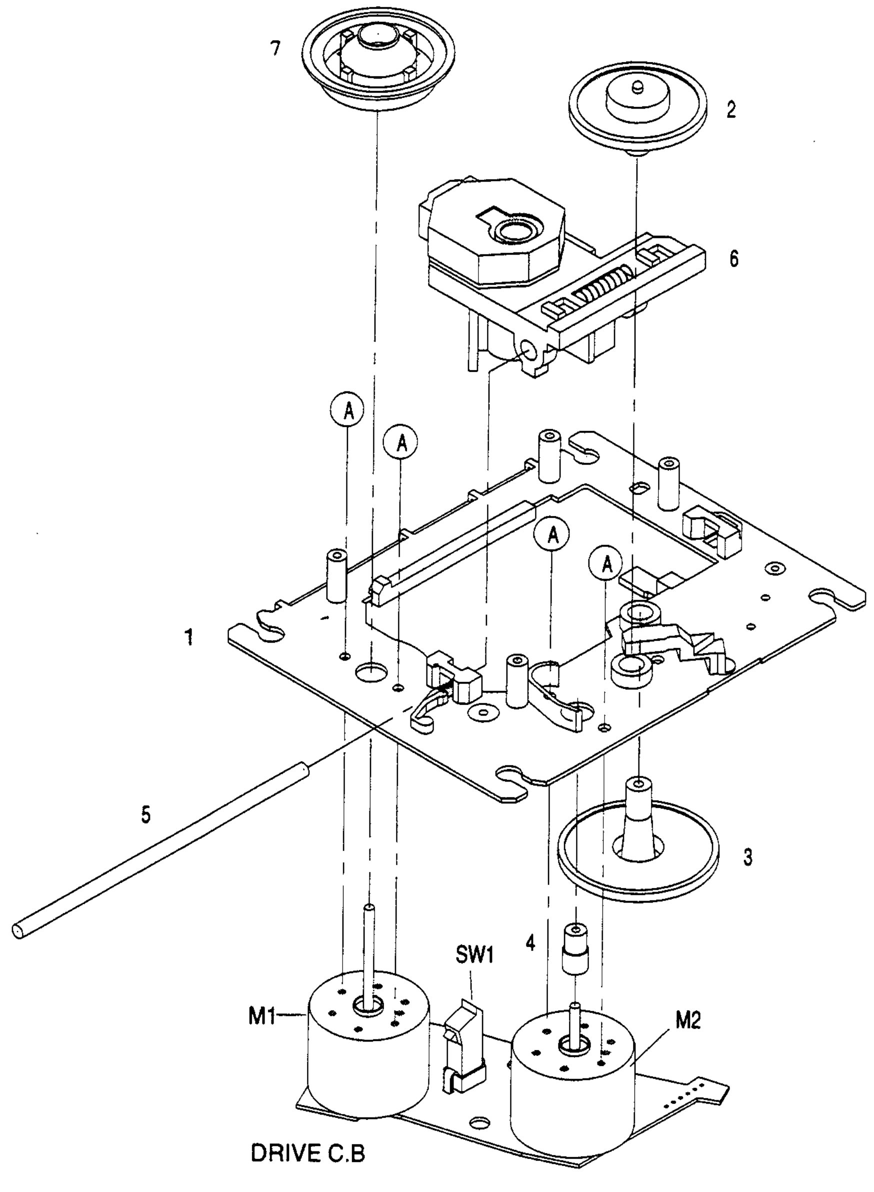


CD MECHANISM PARTS LIST 1／1 (KSM-2131BAM <1D, 1MD>)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カンリ NO.	DESCRIPTION
1	9X-262-587-110	--	MOTOR CHASSIS ASSY
2	92-626-907-010	--	GEAR(A)
6	98-848-379-310	--	OPTICAL PICK UP KSS-213B
7	92-626-908-010	2A	SHAFT SLED
8	92-627-003-010	--	GEAR B
A	97-621-255-150	0E	SCREW+P2-3

CD MECHANISM EXPLODED VIEW 1／1 (3ZG-2 C7N <2D>)



CD MECHANISM PARTS LIST 1／1 (3ZG-2 C7N <2D>)

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION	REF. NO	PART NO.	ｶﾝﾘ NO.	DESCRIPTION
1	83-ZG2-202-71K	1C	O-SERT S ASSY,S	5	83-ZG2-207-119	1A	SHAFT,SLIDE
2	83-ZG2-204-419	0E	GEAR,A	6	87-070-445-010	2C	PICK-UP,KSS-213B
3	83-ZG2-205-219	0E	GEAR,B	7	83-ZG2-233-019	1B	TURN TABLE,A5
4	83-ZG2-220-01K	0E	GEAR,MOTOR 2	A	87-261-032-219	0E	SCREW V+2-3

USE MODEL LIST

CX-NA92 (NSX-A92)
CX-NMT90 (NSX-MT90)
CX-NAV95 (NSX-AV95)
CX-NA71 (NSX-A71)
CX-NMT70 (NSX-MT70)
CX-NAV85 (NSX-AV85)
CX-NA50 (NSX-A50)
CX-NS50 (XG-S50)
CX-NA51 (NSX-A51)
CX-NS52 (NSX-S52)
CX-NMT50 (NSX-MT50)
CX-NAV75 (NSX-AV75)
CX-NK550 (NSX-K550)
CX-NH50 (XR-H5MD)
CX-NA30 (NSX-A30)
CX-NS30 (XG-S30/NSX-S30)
CX-NA31 (NSX-A31)
CX-NA34 (NSX-A34)
CX-NS33
CX-NS32
CX-NS35
CX-NA35
CX-NS36
CX-NAV65 (NSX-AV65)
CX-NAV66 (NSX-AV66)
CX-NH3MD (XR-H3MD)

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
サージサプレッサ	SERGESUPPRESSOR
セラコン	CAP,CERA

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジグアーム	ARM,SHAFT
ジグガイド	GUIDE,SHAFT
ストラップ	STRAP
トクナベ	S-SCREW
ヒンジ	HINGE
ヒンジビス	S-SCREW
ビスセレート	SCREW,SERRART

サービス技術ニュース	
番号	連絡内容
G－　－	
G－　－	
G－　－	

アイワ株式会社
AIWA CO.,LTD.

912162

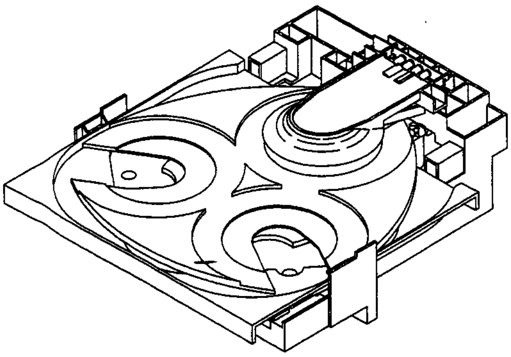
Tokyo Japan

〒110 東京都台東区池之端1－2－11 ☎ 03 (3827) 3111 （代表）

aiwa

aiwa SERVICE

4ZG-1Z



CD MECHANISM

• BASIC CD MECHANISM: KSM-2131 BAM / 3ZG-2 C7 • TYPE: English,Japanese

SERVICE MANUAL

CORRECTION

BASIC NAME	DERIVATION NAME					
4ZG-1Z	1D	2D	1MD	–	–	–

- ■ This Service Manual is replaces "CORRECT Manual"(S/M Code No.09-973-187-50T).
- ■ 本体マニュアルは(S/M Code No.09-973-187-50T)の訂正版です。

■ "このサービスマニュアルにはCDメカニズムの説明は含まれていません。CDメカニズムについては4ZG-1 (S/M Code No..........) のマニュアルを参照して下さい。" の別冊マニュアルの使用文のS/M Code No に誤りがあります。

(正) 09-973-187-50T ← (誤) 09-974-187-50T

下記の機種の別冊メカニズムは09-973-187-50Tを使用又は取得をして下さい。

■ "The CD mechanism description is not included in this Service Manual. Refer to 4ZG-1 (S/M Code No. ....) for description of CD mechanism." Please correct the S/M Code No. as shown below as there was mistake in the description of separate manual.

(Correct) 09-973-187-50T ← (Error) 09-974-187-50T

Please obtain and use the separate manual using the Code No. 09-973-187-50T.

1. 09-978-216-8FE (NSX-S50)
2. 09-978-220-4FE (NSX-AV75)
3. 09-978-195-5FP (NSX-AV96)
4. 09-978-220-3FE (NSX-AV75)
5. 09-973-182-5FP (NSX-A71/S70/S74)

6. 09-975-193-5FP (NSX-S70/S74)
7. 09-974-181-9FP (NSX-A92/A94/S90/S94)
8. 09-974-160-3FE (NSX-A30/A31/S33)
9. 09-976-181-6FE (NSX-AV65/AV66)
10. 09-976-186-6FP (NSX-MT70/MT75/AV85)

11. 09-976-207-0FP (NSX-A72/A74)
12. 09-977-190-4FP (NSX-S90)
13. 09-976-181-5FE (NSX-S30/S32/S33/S35/S36)
14. 09-977-202-7FE (NSX-S22/A22)
15. 09-976-188-4FE (NSX-AV75/NMT50/NMT55)

16. 09-977-181-7FP (NSX-AV95)
17. 09-978-206-6FP (NSX-AV85)
18. 09-978-215-8FE (NSX-S22/S23/XG-S22)
19. 09-978-220-2FE (NSX-S52)
20. 09-977-212-8FE (XG-550/NSX-S52)

21. 09-978-181-4FE (NSX-S32/S33/S36/S37)
22. 09-978-213-4FP (NSX-S74)
23. 09-979-222-5FE (NSX-S22)
24. 09-979-214-1FP (NSX-S94/S95)
25. 09-979-219-1FP (NSX-S90)

26. 09-979-225-2FE (NSX-A66)
27. 09-97A-222-7FE (NSX-S38)

お詫び

09-983-257-90Tで発行したCORRECTIONの表現方法は誤解を生じる為、廃棄して下さい。

Notice

Please discard the CORRECTION issued under 09-983-257-90T in order to avoid the expression which can cause misleading.

サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

アイワ株式会社
AIWA CO.,LTD.

912162

Tokyo Japan

〒110-8710 東京都台東区池之端1-2-11 ☎03（3827）3111（代表）

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